



# HEALTH *Improvement* PLAN

*Public Health Action for the First Decade  
2000-2010*

June 2001

Parris N. Glendening  
*Governor*

*A Product of:*



Kathleen Kennedy Townsend  
*Lt. Governor*

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**MARYLAND’S HEALTH IMPROVEMENT PLAN**

**TABLE OF CONTENTS**  
**At - A - Glance**



**I. HEALTHY MARYLAND OVERVIEW ..... 1**

**II. STATEWIDE FOCUS AREAS ..... 23**

**III. LOCAL FOCUS AREAS ..... 143**

**IV. APPENDICES ..... 301**





# MARYLAND'S HEALTH IMPROVEMENT PLAN

## TABLE OF CONTENTS



<b>I. HEALTHY MARYLAND OVERVIEW.....</b>	<b>1</b>
Foreword .....	3
Major Findings from Maryland's First Health Improvement Plan .....	4
Introduction to the Health Improvement Planning Process in Maryland .....	8
Healthy People Overview .....	10
The Healthy People Initiative in Maryland – A Historical Perspective .....	13
<i>What is Public Health?</i> – a Public Health Primer .....	14
Overview of Maryland's Population .....	16
<b>II. STATEWIDE FOCUS AREAS .....</b>	<b>23</b>
<i>Access to Health Care</i>	
• Increase Access to Necessary Health Care Services .....	24
<i>Cancer</i>	
• Conquering Cancer .....	30
<i>Child and Adolescent Health</i>	
• Preventing Asthma .....	35
• Preventing Childhood Lead Poisoning .....	38
• Promoting Good Nutrition and Physical Activity in Children .....	40
• Improving Access to Health Care for Adolescents .....	42
• Improving the Service System for Children with Special Health Care Needs .....	44
<i>Chronic Diseases</i>	
• Arthritis .....	47
<i>Environmental Health</i>	
• Environmental Justice — Asthma Mortality .....	51
<i>Family Planning</i>	
• Promoting Pregnancy Intendedness and Family Planning .....	55
<i>Heart Disease and Stroke</i>	
• Preventing Heart Disease and Stroke .....	60

<i>HIV</i>	
• Reducing HIV Infection .....	65
• Extending Life for People with HIV .....	69
<i>Immunization and Infectious Diseases</i>	
• Vaccine-Preventable Diseases .....	74
• Prevention of Infections Acquired Within Health Care Facilities (Nosocomial Infections) .....	78
• Preventing Diseases Spread by Animals and Insects (Zoonotic and Arthropod-Borne Diseases) .....	81
• Reducing and Controlling Foodborne Illness .....	84
• Preventing Tuberculosis .....	87
<i>Injury and Violence Prevention</i>	
• Reducing Firearm-Related Deaths .....	91
<i>Maternal and Infant Health</i>	
• Reducing Infant Mortality .....	96
<i>Mental Health</i>	
• Development of a Statewide Comprehensive Crisis Services System .....	101
• Improving the Public Mental Health System .....	102
• Treating Recognized Depression .....	105
<i>Oral Health</i>	
• Reducing Oral Cancer Mortality .....	107
• Preventing Oral Disease in Children .....	111
<i>Public Health Infrastructure</i>	
• Improving Access to Health Data .....	115
• Ensuring an Adequate Public Health Workforce .....	120
<i>Sexually Transmitted Diseases</i>	
• Preventing Sexually Transmitted Diseases .....	126
<i>Substance Abuse</i>	
• Increasing Substance Abuse Treatment .....	132
<i>Tobacco Use</i>	
• Reducing the Use of Tobacco Products .....	136
<b>III. LOCAL FOCUS AREAS .....</b>	<b>143</b>
<i>Allegany County</i> .....	144
• Promoting Access to Health Care for the Uninsured .....	145
• Oral Health .....	148
<i>Anne Arundel County</i> .....	152
• Access to Health Care for the Uninsured .....	153
<i>Baltimore County</i> .....	158
• Increasing Access to Care by Eliminating Barriers .....	159
<i>Calvert County</i> .....	163
• Promoting Adolescent Health .....	164

<i>Caroline County</i> .....	167
• Control of Sexually Transmitted Diseases (STDs) in the Adolescent Population .....	168
<i>Carroll County</i> .....	172
• Assuring Access to Quality Health Services .....	173
• Reduction of Substance Abuse .....	175
• Improving Access to Oral Health Services .....	177
<i>Cecil County</i> .....	180
• Lung Cancer .....	181
• Female Breast Cancer .....	183
• Heart Disease and Stroke .....	185
<i>Charles County</i> .....	188
• Maternal and Infant Health .....	189
<i>Dorchester County</i> .....	194
• Tobacco Cessation in Young Adults .....	195
• Tobacco Use Prevention .....	198
<i>Frederick County</i> .....	202
• Improving Children's Dental Health .....	203
<i>Garrett County</i> .....	207
• Improving Dental Status of Children .....	208
<i>Harford County</i> .....	211
• Public Health Infrastructure .....	212
• Substance Abuse Treatment .....	215
<i>Howard County</i> .....	222
• Reducing the Effects of Asthma .....	223
• Preventing Diabetes and its Complications .....	229
<i>Kent County</i> .....	234
• Reducing Sexually Transmitted Diseases (STDs) in Teens .....	235
<i>Montgomery County</i> .....	239
• Reducing African-American Infant Mortality .....	240
<i>Prince George's County</i> .....	245
• Reducing Infant Mortality .....	246
• Enhancing Infrastructure for Health Planning .....	252
<i>Queen Anne's County</i> .....	256
• Preventing Alcohol and Drug Use Among Youth .....	257
<i>St. Mary's County</i> .....	261
• Promoting Oral Health .....	262
<i>Somerset County</i> .....	265
• Reducing Tobacco Use Among Youth .....	266
<i>Talbot County</i> .....	269
• Reducing Interpersonal Violence in the Lives of Children .....	270
<i>Washington County</i> .....	275
• Reduction of Mortality Associated with Influenza and Pneumonia .....	276



<i>Wicomico County</i> .....	279
• Improve the Health and Well-Being of Women, Infants, Children and Families .....	280
• Reducing Underage Drinking .....	284
<i>Worcester County</i> .....	288
• Mental Health .....	289
<i>City of Baltimore</i> .....	296
• Access to Quality Health Care .....	297
<b>IV. APPENDICES</b> .....	301
Local Health Departments/Focus Area Cross-Reference Table .....	303
Glossary .....	305
<i>List of Contributors</i>	
Steering Committee – Healthy Maryland Project 2010 .....	312
Planning Committee – Health Improvement Plan .....	313
Statewide Priority Areas – Liaisons and Focus Group Members .....	314
Local Health Departments – Liaisons and Focus Group Members .....	319
Integrated Health Planning Summit, May 1999 – Attendees .....	324
Healthy Maryland Project 2010 – Staff .....	326

# **I. HEALTHY MARYLAND OVERVIEW**

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# FOREWORD

This report, Maryland's first Health Improvement Plan (HIP), was developed to promote the public health agenda for Maryland as the 21<sup>st</sup> Century begins. It is a consensus document, formulated with input from health care consumers, providers, and other advocates in the public and private sectors around the state. A detailed list of contributors is provided in the Appendix.

Although this Plan includes a broad array of topics of public health concern, it is not an exhaustive list. Rather it examines and presents recommendations for a focused list of priorities, linked to the priority areas included in the national Healthy People 2010 report. A variety of quantitative and qualitative methods were used by focus groups convened to select the topics discussed in this Plan.

Priority subjects in 17 different focus areas are presented at the state level in this report. A similar array of priority subjects are presented from each of Maryland's 23 counties and Baltimore City with at least one topic from each jurisdiction. However, there are many additional areas of priority concern in these jurisdictions and statewide. The table on page 6 provides a summary listing of state and local priorities discussed in this HIP. Additionally, this table includes areas of priority concern which the local jurisdictions identified in their annual health plans, as well as others that were identified within the plan development process for the modules included in this Plan.

Data used to select these priority areas were primarily from 1997 to 1998. As new assessments are completed with updated facts and figures, these priorities may change. Consequently, every effort will be made to revise the HIP, at regular intervals, to reflect the changing needs of Maryland communities and its residents.

In addition to contributing one or more modules to this report, several local health departments have also published their own Health Improvement Plans or other strategic planning documents. These reports provide a more detailed discussion of local priorities and the process used to identify them.

# MAJOR FINDINGS FROM MARYLAND'S FIRST HEALTH IMPROVEMENT PLAN

As the 21st century opens, Maryland is home to slightly more than 5 million people. The overwhelming majority of these people are relatively young, less than 65 years of age. However, the elderly population, ages 65 years and over, continues to grow and was almost 12 percent of the total population in 1998. Maryland is home to a diverse ethnic population; African Americans, at almost 28 percent of the entire statewide population in 1998, constitute the major minority group. This proportion is decreasing as the number of other ethnic minorities continues to climb.

A variety of health status information exists to gauge the health of this population. We continue to assess health primarily with mortality, or death, data. An examination of available statistics indicates that the ten leading causes of death in 1998, at the end of the last century, were:

## ***Leading Causes of Death in Maryland, 1998***

<b><u>Rank:</u></b>	<b><u>Cause:</u></b>
<b>1</b>	Heart Disease
<b>2</b>	Cancer
<b>3</b>	Cerebrovascular disease (stroke and related circulatory system conditions)
<b>4</b>	COPD (chronic obstructive pulmonary disease)
<b>5</b>	Pneumonia and Influenza
<b>6</b>	Diabetes
<b>7</b>	Unintentional Injury (with motor vehicle injuries accounting for almost half)
<b>8</b>	Septicemia (infection of the blood)
<b>9</b>	Homicide
<b>10</b>	HIV (human immunodeficiency virus)

**Source:** Maryland Vital Statistics, 1998

Findings from extensive biomedical research during the past century indicate that the causes of many of the health problems that contribute to these deaths can be prevented and/or greatly controlled. Healthy People 2010 is based on this premise and Maryland's Project 2010 joins the national effort. To assist in charting a focused preventive health course, a variety of mortality and morbidity data, other health status information, and information on health care resources, including the public health workforce, were examined to identify areas for priority attention for Maryland's first Health Improvement Plan. At the state level, 17 areas were selected for priority attention. At the local level, a wide variety of health problems within these 17 areas and also in other areas, were selected for priority attention.

A summary of state and local priorities is provided in the table on the next page. An analysis of the overlapping areas yields the ranking among the priorities as detailed below:

<b>Top Ten Focus Areas Addressed or Listed as Priorities in the Maryland Health Improvement Plan for 2010:</b>	
<b><u>Priority Rank</u></b>	<b><u>Focus Areas</u></b>
<b>1</b>	Child & Adolescent Health
<b>2</b>	Substance Abuse
<b>3</b>	Cancer
<b>4</b>	Access to Health Care
<b>5</b>	Maternal & Infant Health and Injury and Violence (tied for fifth)
<b>6</b>	Tobacco
<b>7</b>	Immunization and Infectious Disease and Mental Health (tied for seventh)
<b>8</b>	Heart Disease, HIV, and Stroke and Sexually Transmitted Diseases (tied for eighth)
<b>9</b>	Public Health Infrastructure
<b>10</b>	Oral Health, Environmental Health, and Family Planning (tied for tenth)

Although this list provides some insight into the leading areas of concern among those striving to improve the health of Marylanders and the communities in which they live, it only provides a qualified view. First, the list is a summary. A list of priorities for any one of the 24 local jurisdictions may vary greatly. Second, within the listed priorities, there are a wide variety of problems that require attention in order to improve specific problems at the state and/or local levels. Available resources and political will also impact efforts and outcomes. Finally, it is important to note that health status is not static; for any specific measure, there are ongoing changes as the health status improves or problems worsen. Continual monitoring and periodic re-examinations are essential in order to chart a timely and appropriate course to improve and promote Maryland's health.

## STATEWIDE AND LOCAL PRIORITY AREAS – 2000

DHMH Priority Areas County	Access to Health Care	Cancer	Cardiovascular Disease & Stroke	Child & Adolescent Health	Chronic Diseases	Environmental Health	Family Planning	HIV	Immunizations & Infectious Diseases	Injury & Violence Prevention	Maternal & Infant Health	Mental Health	Oral Health	Public Health Infrastructure	Sexually Transmitted Diseases	Substance Abuse	Tobacco Use	Other	Totals
Allegany	✓	*	*	*	*		*	*	*		*	*	✓	*	*	*	*	*	16
Anne Arundel	✓	*		*	*	*		*	*	*	*				*	*	*	*	13
Baltimore	✓			*							*							*	4
Calvert	*			✓		*	*			*		*				*	*	*	9
Caroline				✓				*	*			*			*				5
Carroll	✓	*	*		*	*				*		*	✓			✓		*	10
Cecil		✓	✓				*	*	*	*					*	*	*		9
Charles		*	*	*		*		*		*	✓	*		*		*		*	11
Dorchester		*	*	*			*	*	*	*	*			*	*		✓		11
Frederick	*	*		*								*	✓	*		*		*	8
Garrett			*	*			*			*			✓			*	*		7
Harford	*	*	*	*	*	*	*			*		*		✓	*	✓	*		13
Howard	*			✓	✓	*								*				*	6
Kent				*				*	*					*	✓				5
Montgomery	*	*		*	*			*		*	✓		*			*		*	10
Prince George's	*						*	*	*		✓	*		✓	*	*			9
Queen Anne's		*		*												✓		*	4
Somerset		*		*							*					*	✓		5
St. Mary's	*	*	*						*	*	*		✓						7
Talbot		*		*		*	*		*	✓	*	*	*			*	*	*	12
Washington	*	*	*	*	*			*	✓	*	*	*	*			*	*	*	14
Wicomico		*	*	*							✓			*		✓	*	*	7
Worcester	*	*		*					*	*	*	✓		*	*	*	*	*	12
Baltimore City	✓	*		*		*									*	*			6
Totals	14	17	10	20	7	8	8	10	11	13	13	11	8	9	10	18	12	14	213

Note:

### Statewide Priorities:

Each of the seventeen focus areas listed in first row is addressed as a statewide priority in the HIP.

### Local Priorities:

- ✓ An issue of priority concern within this focus area is the topic of a module included in the HIP for this jurisdiction.
- \* This focus area was identified as an additional area of priority concern during the HIP development process and/or overlaps with an area identified as a priority concern in this jurisdiction's FY00 Annual Plan for the Core Public Health Funding Program. "Other" includes topics that do not fit in one of the featured priority areas.





# INTRODUCTION TO THE HEALTH IMPROVEMENT PLANNING PROCESS IN MARYLAND



The Maryland Health Improvement Plan (HIP) is a product of Healthy Maryland Project 2010, Maryland's response to the nationwide Healthy People initiative.

## What is a Health Improvement Plan?

A health improvement plan is a document that provides a framework and consensus-based recommendations for improving the health of the residents of a state or local community. In a time when new health information is presented and refuted daily and budgets revolve around the latest health threat, a health improvement plan provides insight into health solutions for the long term. It presents a road map for how to achieve health for all. A positive health status provides the foundation for success in health and business. It is a foundation for a healthy economy.

## What is Healthy People?

Healthy People is the name of the objective-setting process for health promotion for the nation. It is further described in the Healthy People Overview on page 6.

## What is Healthy Maryland Project 2010?

Maryland's response to the national Healthy People 2010 initiative was launched in July of 1998 to unite stakeholders from all segments of the community in a collaborative effort to protect and improve the health of all Maryland residents.

## How was the Maryland Health Improvement Plan developed?

A wide range of government and non-government representatives participated in the development of Maryland's Health Improvement Plan. The Healthy Maryland Project 2010 steering committee is made up of over 100 representatives from state and local health departments, academia, medicine and the non-profit, faith, and business communities. The steering committee approved the overall concept of the planned report. The planning committee was instrumental in overseeing the year-long development process. In the Fall of 1999, State health program directors and local health department personnel were given guidance for development of each module by the Office of Health Policy at the Maryland Department of Health and Mental Hygiene. Input from outside government was required for each module through focus groups or an existing process. Draft modules were compiled in the Spring of 2000, and a working draft was distributed for public comment in August 2000. At each stage, care was taken to include community input for the purpose of ensuring a consensus-based plan.

## What is contained in the Maryland Health Improvement Plan?

The Maryland Health Improvement Plan sets Maryland-specific objectives for improving the health of Marylanders. In addition, the HIP presents action steps for how to achieve these objectives. The focus areas presented in the document, however, do not make a complete list of the health problems facing Maryland's citizens. The focus areas included in the document were chosen by

consulting four sources: the 28 national focus areas, the outcome priorities of the 1999 Healthy Maryland Project 2010 Summit, the priorities presented in the 24 local health departments' annual plans for FY2001, and a survey of the Healthy Maryland Project 2010 Steering Committee. The 17 focus areas make up the "Statewide Focus Areas" section of the document. At least one topic of concern is addressed in each focus area.

Each local jurisdiction has chosen one or more focus areas to highlight in the HIP. These do not necessarily represent the highest priority health issue for that jurisdiction, but are areas of concern. The modules from Maryland's 24 local jurisdictions make up the "Local Focus Areas" section of the document. The appendices contain the names of all the contributors.

### **How will the Maryland Health Improvement Plan be used?**

Everyone is encouraged to participate in improving the health of Maryland's residents. Achieving the objectives outlined in the HIP will require the combined efforts of organizations, families and individuals. The list below covers some of the opportunities for using the Maryland Health Improvement Plan:

- **Health-related organizations** are encouraged to use this document in developing organizational plans, developing priorities, and identifying opportunities for collaboration.
- **Faith communities, community-based organizations, and businesses** can use this document to guide health promotion activities, special events, and publications.
- **Schools and academic institutions** can use this document to assist in health promotion curricula and activities for students.
- **State and local government** representatives can use this document as a reference, and to identify areas for collaboration.
- **Local communities** can use this document to assist them in their health objective-setting processes.
- **Families and individuals** can use this document to set personal goals for health improvement.

### **What's next?**

Project 2010 will continue to promote Maryland's public health. Major action areas, in non-priority order, include:

- Improving the statewide public health infrastructure;
- Garnering support of the Maryland business and faith communities;
- Narrowing the gap between public health theory and public health practice;
- Addressing gender, age, cultural, racial, and geographic health disparities;
- Updating Healthy Maryland and other related health status indicators;
- Improving health status measurement capability;
- Improving the quality of local level health data;
- Promoting collaboration among all health promotion advocates; and
- Broadening participation from all Maryland communities in Project 2010.

# HEALTHY PEOPLE OVERVIEW

## What is Healthy People?

Healthy People 2010 is the prevention agenda for the Nation. It is a statement of national health objectives designed to identify the most significant preventable threats to health and to establish national goals to reduce these threats. Healthy People 2010 offers a simple but powerful idea: provide the objectives in a format that enables diverse groups to combine their efforts and work as a team. It is a road map to better health for all and can be used by many different people, States, communities, professional organizations, and groups to improve health.



Healthy People 2010 builds on initiatives pursued over the past two decades. The 1979 Surgeon General's Report, Healthy People, and Healthy People 2000: National Health Promotion and Disease Prevention Objectives, each established national health objectives and served as the basis for the development of State and community plans. Like its predecessors, Healthy People 2010 was developed through a broad consultation process, built upon the best scientific information, and designed to measure programs over time.

## Development of Healthy People 2010 Objectives

The 28 focus areas of Healthy People 2010 have been developed by leading Federal agencies with the most relevant scientific expertise. The development process was informed by the Healthy People Consortium--an alliance of more than 350 national membership organizations and 250 State health, mental health, substance abuse, and environmental agencies. Additionally, through a series of regional and national meetings and an interactive Web site, more than 11,000 public comments on the draft objectives were received. Public comments were posted at [www.health.gov/hpcomments](http://www.health.gov/hpcomments) for people to use in their own health improvement efforts. The Secretary's Council on National Health Promotion and Disease Prevention Objectives for 2010 also provided leadership and advice in the development of national health objectives.

## State and Community Health Objectives

Nearly all States, the District of Columbia, and Guam have developed their own Healthy People plans. Most States have built on the national objectives, but virtually all have tailored them to their specific needs. A 1993 National Association of County and City Health Officials survey showed that 70% of local health departments used at least some Healthy People 2000 objectives. Many States, working with community coalitions, are now developing their own versions of Healthy People 2010. The Healthy People 2010 Toolkit, which provides examples of State and national experiences in setting and using objectives, is available on the Web.

## Using Healthy People Objectives

Healthy People objectives have been specified by Congress as the measure for assessing the progress of the Indian Health Care Improvement Act, the Maternal and Child Health Block Grant, and the Preventive Health and Health Services Block Grant. Healthy People objectives also have been used in performance measurement activities. For example, the National Committee on Quality Assurance incorporated many Healthy People targets into its Health Plan Employer Data and Information Set (HEDIS) 3.0, a set of standardized measures for health care purchasers and consumers to use in assessing performance of managed care organizations in the areas of immunizations, mammography screening, and other clinical preventive services.

Individuals, groups, and organizations are encouraged to integrate Healthy People 2010 into current programs, special events, publications, and meetings. Businesses can use the framework, for example, to guide worksite health promotion activities as well as community-based initiatives. Schools, colleges, and civic and faith-based organizations can undertake activities to further the health of all members of their community. Health care providers can encourage their patients to pursue healthier lifestyles and to participate in community-based programs. By selecting from among the national objectives, individuals and organizations can build an agenda for community health improvement and can monitor results over time.

## Healthy People 2010 Goals

1. Increase quality and years of healthy life.
2. Eliminate health disparities.

## Healthy People 2010 Focus Areas

- Access to Quality Health Services
- Arthritis, Osteoporosis, and Chronic Back Conditions
- Cancer
- Chronic Kidney Disease
- Diabetes
- Disability and Secondary Conditions
- Educational and Community-Based Programs
- Environmental Health
- Family Planning
- Food Safety
- Health Communication
- Heart Disease and Stroke Prevention
- HIV
- Immunization and Infectious Diseases
- Injury and Violence Prevention
- Maternal, Infant, and Child Health
- Medical Product Safety
- Mental Health and Mental Disorders
- Nutrition and Overweight
- Occupational Safety and Health
- Oral Health
- Physical Activity and Fitness
- Public Health Infrastructure
- Respiratory Diseases
- Sexually Transmitted Diseases
- Substance Abuse
- Tobacco Use
- Vision and Hearing

The Office of Disease Prevention and Health Promotion (ODPHP), United States Department of Health and Human Services, is the Coordinator of the Healthy People 2010 Initiative.

**Healthy People 2010**

<http://www.health.gov/healthypeople>

**Office of Disease Prevention and Health Promotion**

<http://odphp.osophs.dhhs.gov>

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# THE HEALTHY PEOPLE INITIATIVE IN MARYLAND

## A Historical Perspective

Maryland's involvement in the national Healthy People initiative dates back to the early 1990's. In May 1993, Maryland published ***Healthy Maryland 2000 - Volume 1***. Oversight for development of the report was provided by a committee of preventive health experts from Maryland's state and local health departments. This first report:

- demonstrated Maryland's health status in comparison to national measures.
- included Maryland's status for 220 objectives. Maryland met or surpassed the national Healthy People targets for 49 of the 220 objectives.
- included Maryland rankings for the Consensus Set of Health Indicators, a subset of the national objectives used as a marker for health status.

In September 1996, a second report, ***Healthy Maryland - Volume 2***, was released. The content of this report was expanded to reflect the interests of a wider range of Maryland's public health officials as well as public and private sector partners. The second report included:

- Maryland-specific objectives that highlighted statewide and local preventive health programs.
- State and, for the first time, local rankings for the Consensus Set of Health Indicators and 11 additional indicators.

On July 30, 1998, the Maryland Secretary of Health launched **Healthy Maryland Project 2010** as a top priority. The primary focus of Healthy Maryland Project 2010 is to unite Maryland stakeholders in a collaborative effort to protect and improve the health of all Maryland residents.

- In September 1998, a steering committee was established to facilitate broad communication and input for this statewide initiative.
- In May 1999, Healthy Maryland Project 2010 hosted a two-day summit to identify health improvement priorities for Maryland. Participants were assigned a Maryland region, and asked to review jurisdiction-specific data, select priority indicators, and develop health objectives.
- A summary of the Healthy Maryland Project 2010 Summit proceedings was published in a report released in October 1999.
- In October 1999, the Healthy Maryland Project 2010 Steering Committee reviewed and approved the proposed process for development of Maryland's first Health Improvement Plan (HIP).

# WHAT IS PUBLIC HEALTH?

## A Public Health Primer

Public health is:

- What we, as a society, do collectively to assure the conditions in which people can be healthy.
- “Public,” because it involves “organized community effort.” It is not simply the outcome of isolated, individual effort. Its long-range goal, optimal health for the entire community, encompasses both the sum of the health status of individual community members and community wide benefits, such as clean air and water.
- The term “health” is perhaps best understood by reference to the well-known World Health Organization (WHO) definition. WHO defined health as “a state of complete well-being, physical, social, and mental, and not merely the absence of disease or infirmity.” Thus, health is multi-dimensional and composed of, at a minimum, physical functioning, psychological well-being, social and role functioning, and health perceptions.



WHO Logo

The nation’s goal to increase the span of healthy life for Americans--put forward in Healthy People 2000--includes not only prevention of premature death, disability, and disease, but also enhancement of the quality of life.

Historically, public health has made a difference in the quality of life for all Americans. Governmental actions to assure the health of the people--such as water quality control, immunizations, and food inspection--have prevented much illness and many deaths. These traditional accomplishments demonstrate the value of public health efforts, and exemplify the kind of success that is possible as a result of organized effort on the basis of technical knowledge.

### Why should we be concerned about public health?

Present threats to the health of the people include urgent problems, such as the AIDS epidemic; enduring problems, such as injuries and chronic illness; and growing challenges, such as the aging of our population and the toxic by-products of a modern economy, transmitted through air, water, soil, or food. However, attention focused on specific health problems can lead to episodic actions, not to the sustained efforts that are needed. The necessary public health capacity to cope with the immediate, enduring, and impending threats to health cannot be turned on and off as particular health problems arise and receive attention. This necessary capacity -- competent people, effective leadership, a scientifically sound knowledge base, the tools to monitor health problems and measure progress, a productive organizational structure, adequate financial resources, and a legal foundation that supports effective action--must be nurtured and supported by the society that reaps the benefits.





# OVERVIEW OF MARYLAND'S POPULATION

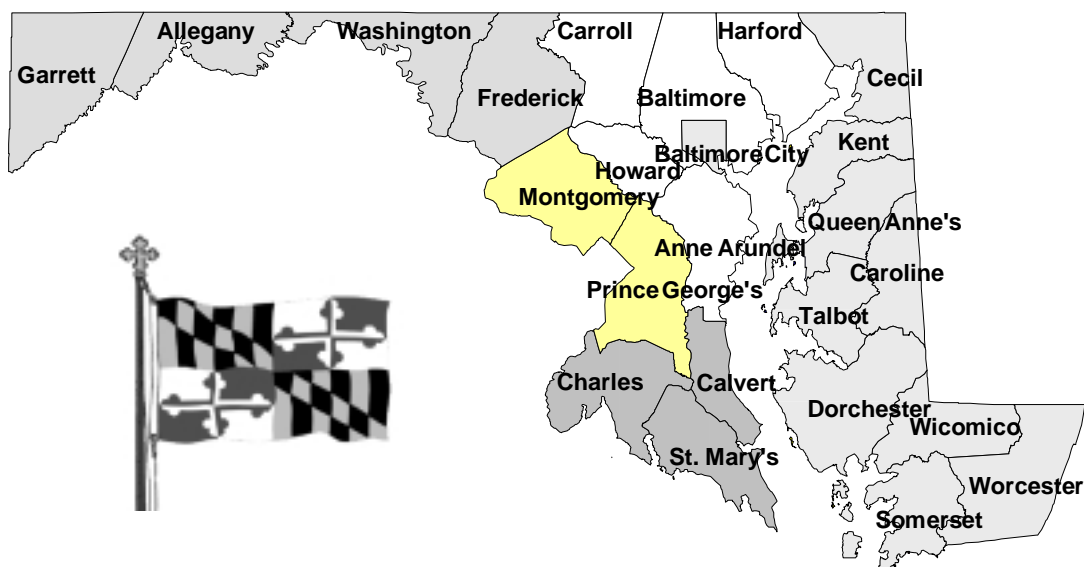
## MARYLAND AT A GLANCE\*

	Maryland	U.S.
<b>Demographics<sup>1,2</sup></b>		
Total resident population (in 1,000), 1998 .....	5,135	270,299
Under age 5 population (as % of total), 1998 .....	6.7	7.0
Age 65+ population (as % of total), 1998 .....	11.5	12.7
Non-white & Hispanic population (as % of total), 1998 .....	35.2	27.7
<b>Health Status<sup>3,4,5,6,7</sup></b>		
Vaccine coverage for children 19-35 mos (% of), 1998 .....	79	81
Smokers-- adult population (% of), 1998 .....	22.4	22.9
AIDS cases reported per 100,000 pop., 1998 .....	31.9	17.1
Infant Mortality (total), 1998 .....	8.6	7.2
Low birth weight babies (% of)		
White Rate .....	6.4	6.5
African-American Rate .....	13.1	13.0
<b>Health Care Coverage and Economic Status<sup>8,9,10,11,12,13</sup></b>		
Nonelderly insurance status (% of pop.) 1995-97 average		
Total private (% of) .....	76.9	70.7
Medicaid and other public (% of) .....	7.8	11.4
Total enrollment in HMOs (as % of pop./insured pop), 1998 .....	34.9/40.5	29.2/34.7
Total uninsured (% of pop.) 1996-98 average .....	13.8	16.0
Uninsured by race (%), (White/Minority), 1995-97 average .....	9.6/21.2	11.8/26.2
Cost of employment-based family health coverage, 1998		
Total premium (average per employee) .....	\$5,070	\$4,953
Employee contribution (average per employee) .....	\$1,647	\$1,439
Personal income per capita, 1998 .....	\$30,023	\$26,482
Median family income, 1998 .....	\$55,702	\$42,471
Unemployment rate (% of civilian work force), 1998 .....	4.6	4.5
<b>Resources Available,<sup>9,14</sup></b>		
Primary Care Physicians** per 100,000 pop., 1997 .....	103	84
Physician Specialists** per 100,000 pop., 1997 .....	208	145
Registered Nurses per 100,000 pop., 1998 .....	845	829
Population underserved by Primary Care MDs (% of), 1997 .....	2.2	9.6
<b>Utilization of Services<sup>15</sup></b>		
Average stay in community hospitals, 1997 (days) .....	5.5	6.1
Outpatient visits (incl. ER) to all hospitals (per 1,000 pop.), 1997 .....	1063.7	1681.9
Emergency room visits to community hospitals (per 1,000 pop.) 1997 .....	316.3	346.8

\* Adapted from: "State Health Care Expenditures, Experience from 1998," Maryland Health Care Commission, January, 2000, Baltimore, MD.

\*\* Count of nonfederal physicians (MDs or Osteopaths) in patient care: primary care is general or family practice, general internal medicine and general pediatrics; specialists are all other types of specialties, including OB/GYN.

**M**aryland is a diverse and varied State, both geographically and economically. Though small in size (only 9,843.62 sq. miles), with a 1999 population estimate of 5,171,634, the State ranked 19<sup>th</sup> in population, and 6<sup>th</sup> nationally in population density. Its geographic diversity is showcased by the Appalachian Mountains to the west and the Chesapeake Bay and Atlantic Ocean to the east. Frederick County has the largest land area (662.72 square miles), and Baltimore City has the smallest (80.34 square miles).

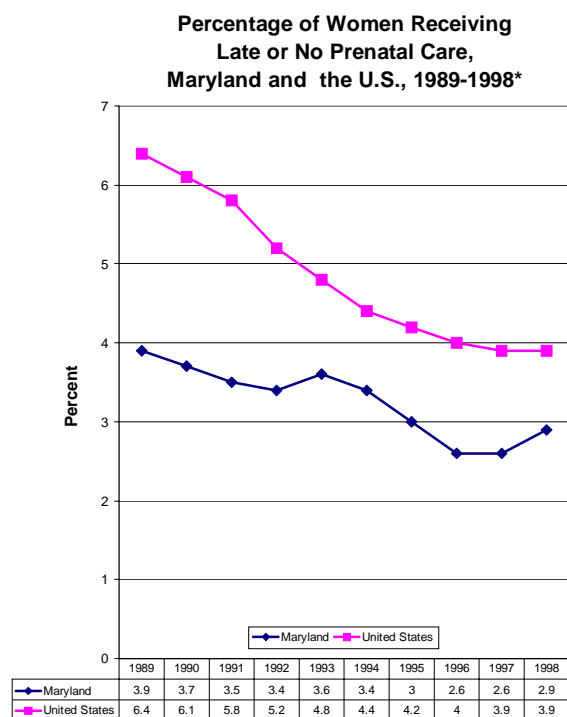
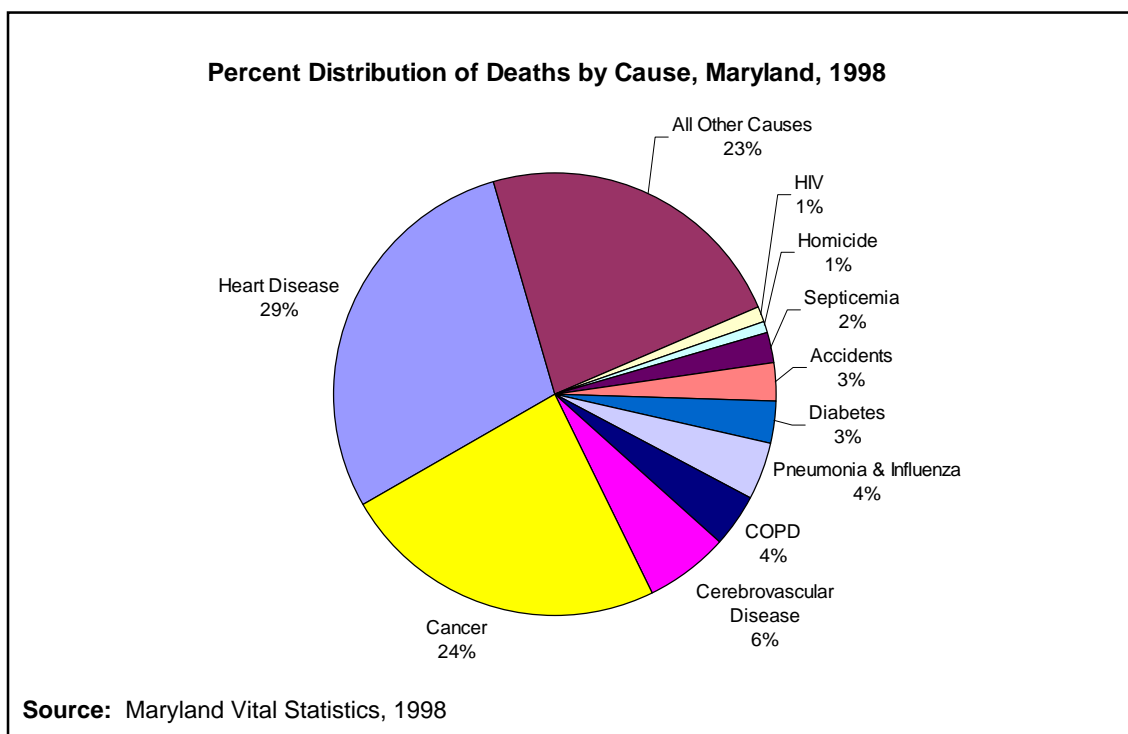


Maryland has much to be proud of, and, as any state, also has areas which need improvement. As a state, Maryland ranks first in the nation in the percentage of professional and technical workers in the workforce. Our State ranks first in the rate of high school completions (95%, compared to 86% for the nation), and second among the 50 states in the percentage of the population (31.8%) age 25 years and older who have completed a bachelor's degree or more. Maryland's median household income of \$50,016 is the second highest in the nation, placing the State 29% above the national average. Maryland residents experience the lowest poverty rate in the nation, with 7.2% of the population living below the poverty level, compared to 12.7% for the United States as a whole. The Children's Rights Council, a national child advocacy organization, recently ranked Maryland as the seventh best state in the United States in which to raise a child. In the Mid Atlantic States, Maryland ranks first.

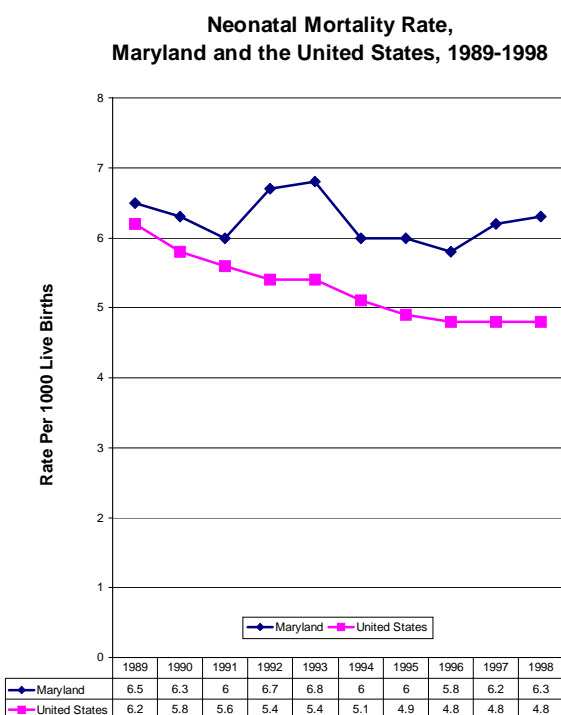
As impressive as this information is, certain segments of Maryland's population do not demonstrate the same progress as their national counterparts. The health status of some Marylanders has shown declining health, indicating an increased need for intervention. Areas which need increased attention include care for infants and children, heart disease, and influenza and pneumonia vaccinations. Both the percentage of births to women receiving late or no prenatal care and neonatal death rates were slightly higher in 1998 than in 1997.

Heart disease remains the leading cause of death, even though the age-adjusted mortality rate for heart disease has declined by 26% over the last 100 years. The combined death rate from pneumonia and influenza are still important, and actually rose from 1997 to 1998. Diabetes and HIV are also leading causes of death in Maryland.

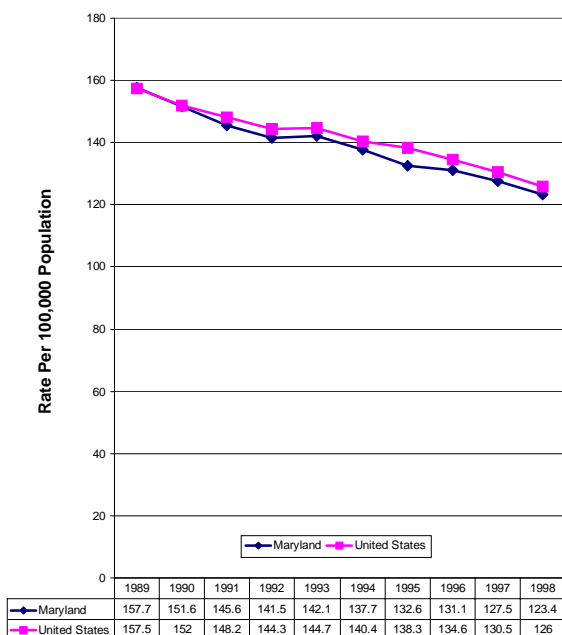
The following graphics provide a picture of Maryland's overall health status:



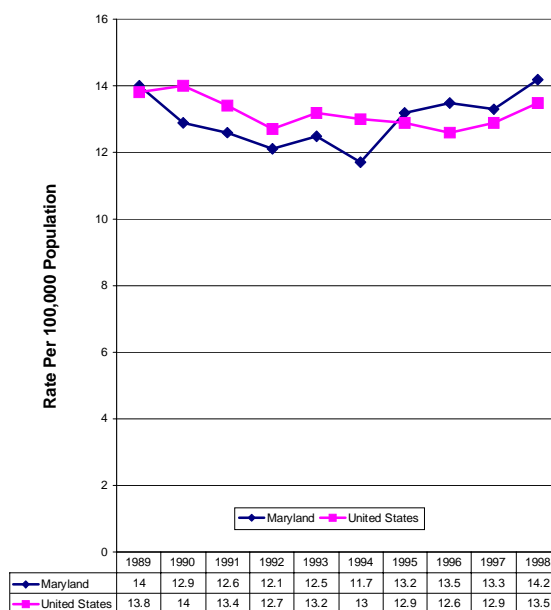
**Source:** Maryland Vital Statistics, 1998



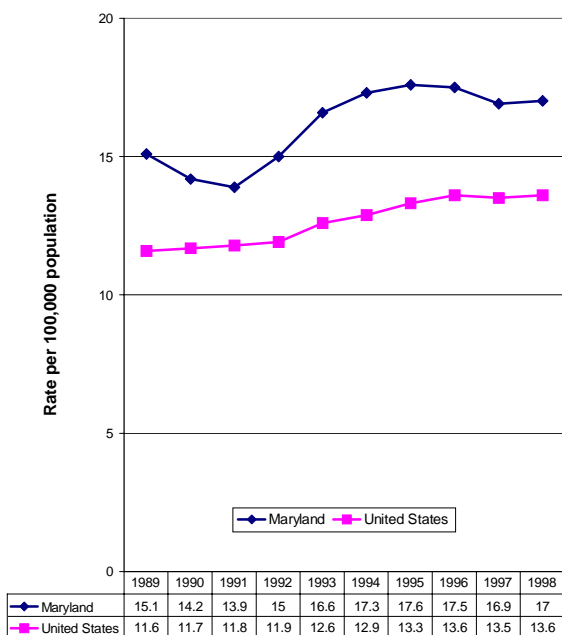
**Source:** Maryland Vital Statistics, 1998

**Age-Adjusted Death Rate for Diseases of the Heart, Maryland and the U.S., 1989-1998**

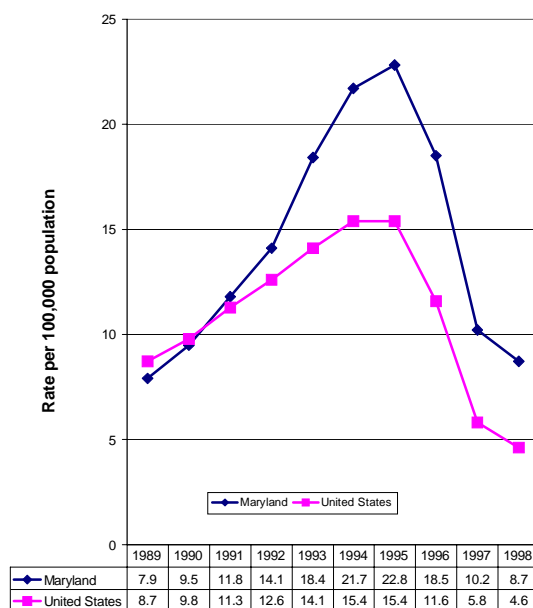
Source: Maryland Vital Statistics, 1998

**Age-Adjusted Death Rate for Pneumonia and Influenza, Maryland and the U.S., 1989-1998**

Source: Maryland Vital Statistics, 1998

**Age-Adjusted Death Rate for Diabetes, Maryland and the U.S., 1989-1998**

Source: Maryland Vital Statistics, 1998

**Age-Adjusted Death Rate for Human Immunodeficiency Virus, Maryland and the U.S., 1989-1998**

Source: Maryland Vital Statistics, 1998

## Data Sources

- <sup>1</sup> From "Population Estimates for the U.S., Regions, and State by Selected Age Groups and Sex: Annual Time Series, July 1, 1990 to July 1, 1998 (includes revised April 1, 1990 census population counts)," U.S. Department of Commerce, U.S. Census Bureau, Population Division, Population Distribution Branch, *U.S. Census Bureau Web Site*. Website: <http://www.census.gov/population/estimates/state/st-99-09.txt>. Accurate as of July 15, 1999. Regional estimates derived from: "1998 Population for Maryland Jurisdictions," September, 1999, Maryland Office of Planning. Website: <http://www.op.state.md.us/MSDC>.
- <sup>2</sup> "Population Estimates for States by Race and Hispanic Origin: July 1, 1998." U.S. Department of Commerce, Census Bureau, Population Division, Population Distribution Branch. Website: <http://www.census.gov/population/estimates/state/srh/srh98.txt>. Accurate as of September 15, 1999.
- <sup>3</sup> "Births and Deaths: Preliminary Data for 1998." By J. A. Martin, B. L. Smith, T. J. Mathews, and S. J. Ventura, 1999, *National Vital Statistics Reports*, 47 (25), Hyattsville, MD: National Center for Health Statistics. NOTE: Rates reported in Table are not age-adjusted.
- <sup>4</sup> *Maryland Vital Statistics 1998 Preliminary Report*, Maryland Department of Health and Mental Hygiene, Division of Health Statistics, 1998, Baltimore, MD, 1998. NOTE: Rates reported in Table 1 are not age-adjusted.
- <sup>5</sup> "Table 2a. Estimated Vaccination Coverage with Individual Vaccines among Children 19-35 Months of Age by Census Division and State--United States," from the National Immunization Survey, 1998, Centers for Disease Control and Prevention, National Center for Health Statistics, National Immunization Survey. Website: <http://www.cdc.gov/nip/coverage>.
- <sup>6</sup> *1998 Behavioral Risk Factor Surveillance Summary Prevalence Report*, Centers for Disease Control and Prevention, June 18, 1999. Atlanta, GA: Centers for Disease Control and Prevention. NOTE: U.S. estimate includes Puerto Rico.
- <sup>7</sup> "Table 2: rate reported for U.S. includes the 50 states and the District of Columbia, but excludes U.S. dependencies, possessions, and associated nations," Centers for Disease Control and Prevention, 1998, *HIV/AIDS Surveillance Report*, 10 (2), 8. Regional estimates derived from: "AIDS Cases by Maryland County Diagnosed in 1998 and Reported through March, 1999," Maryland Department of Health and Mental Hygiene, AIDS Administration, 1999. Baltimore, MD.
- <sup>8</sup> "Current Population Reports, Series P620-208," by J.A. Campbell and the U.S. Bureau of the Census, 1999, *Health Insurance Coverage: 1998*. Washington, DC: U.S. Government Printing Office.
- <sup>9</sup> *Reforming the Health Care System: State Profiles 1999*, by J. Lamphere, N. Brangan, S. Bee, and K. Griffin, 1999, Washington, DC: Public Policy Institute/American Association of Retired Persons.
- <sup>10</sup> Maryland Health Care Commission (MHCC) calculations based on (1) population estimates from citation no. 1; (2) percent insured from citation 9; (3) national number enrolled in HMOs from *The InterStudy Competitive Edge*, 9 (2); *Part II: HMO Industry Report*; Minneapolis, MN; and (4) Maryland residents enrolled in HMOs estimated by MHCC from Maryland Insurance Administration annual filings adjusted to include residents in HMO contracts located outside of Maryland.
- <sup>11</sup> **National:** "Unemployment Rate -- Civilian Labor Force, Age 16 Years and Older, Seasonally Adjusted," U.S. Department of Labor, Bureau of Labor Statistics. Labor Force Statistics from the Current Population Survey. Web site: <http://www.bls.gov/cps/home.htm>. NOTE: Monthly statistics were averaged to produce yearly figure. **State:** "Maryland Civilian Labor Force, Employment and Unemployment by Place of Residence -- 1978-1998" Maryland Department of Labor, Licensing, and Regulation. Website: <http://www.dlir.state.md.us/lmi/78.htm>. **Counties:** "Regional Data --1990 to 1998 Annual Averages, Civilian Labor Force, Employment and Unemployment by Place of Residence," Maryland Department of Labor, Licensing, and Regulation. Website: <http://www.dlir.state.md.us/lmi/9097avg.htm>.

- <sup>12</sup> **National and state:** "Regional Accounts Data, State Personal Income," U.S. Department of Commerce, Economic and Statistics Administration, Bureau of Economic Analysis. Website: <http://www.bea.doc.gov/bea/regional/spi/>. **Counties:** Maryland Office of Planning, Research and State Data Center, Bureau of Economic Analysis.
- <sup>13</sup> U.S. Agency for Health Care Policy and Research, Center for Cost and Financing Studies, 1996. MEPS IC-001: *1996 Employer-Sponsored Health Insurance Data*. **Total premium:** "Table 2U, 1996 Medical Expenditure Panel Survey, Insurance Component." Refers to the average family premium paid by private sector establishments that offer health insurance for family coverage per enrolled employee. Excludes temporary and contract workers. If more than one family rate was offered, the cost for a family of four was collected. **Employee contribution:** "Table 2V: 1996 Medical Expenditure Panel Survey, Insurance Component." Refers to the average contribution by an enrolled employee, excluding temporary or contract workers, for family coverage at private-sector establishments that offer health insurance. If more than one family rate was offered, the cost for a family of four was collected.
- <sup>14</sup> Maryland Health Care Commission calculations based on: (1) American Medical Association Physician Masterfiles; (2) American Osteopathic Association data; and (3) Bureau of the Census State and County Population Estimates; all contained in U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions' *Area Resource File: February 1999 Release*.
- <sup>15</sup> *Health Care State Rankings*, (7th ed.), by K. Morgan, S. Morgan, N. Quitno (Eds.), 1999, Lawrence, KS: Morgan Quitno Press. NOTE: Primary care physicians, p.437; Physician specialists, p.445; Physician assistants, p.481; Occupancy rate in community hospitals, p. 212; Average stay in community hospitals, p.211; Admission to community hospitals, p. 208; Outpatient visits to community hospitals, p. 213; Emergency outpatient visits to community hospitals, p. 214; Surgical operations in community hospitals, p. 7. Population estimates derived from U.S. Department of Commerce, Census Bureau. "Total Resident Population on July 1, 1997." Website: <http://www.census.gov/population/www/estimates/statepop.html>. Accurate as of October, 1998.

## **II. THE STATEWIDE FOCUS AREAS**

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# ACCESS TO HEALTH CARE



## Increase Access to Necessary Health Care Services for Marylanders

### Definition

Access to quality health care has been defined by the Institute of Medicine as, “the timely use of personal health services to achieve the best possible health outcomes.” Ensuring access to health care is one of four enabling goals proposed by *Healthy People 2010* to promote progress toward achieving the overarching goals of increasing quality and years of healthy life, and eliminating health disparities.



### Problem

Access to health care is impacted by a number of influences, including the ability to pay for care, the availability of health services, and social and cultural barriers. All three factors have broad-reaching implications for unmet health care needs of millions of Americans on a daily basis. Emphasis is usually placed on the inability to pay for health care (or the lack of health insurance) as the primary problem facing a large portion of our society. However, the availability of health services, as well as the social and cultural barriers that many Americans and Marylanders face are also major contributors to any problem with lack of access to health care services.

To date, most initiatives to improve access focus on providing health care to those who cannot afford health insurance, either employer-based, or publicly subsidized. But the remaining two factors--available health services, and cultural and social barriers--while more difficult to objectively address, are vital components to the access problem in the United States and in Maryland. Analyses of these two factors in Maryland, in combination with information on health insurance coverage, will provide a broader-based overview of all reasons for the limitations on access to health care in Maryland.

While it is possible and very helpful to examine raw numbers of primary care and specialist providers in the varied regions of Maryland, it has proven more difficult to capture information on providers who are willing to participate in expanding managed care systems.

Cultural and social barriers to use of the health care system are many, and are especially difficult to quantify. Existing data collection does not adequately identify these impediments to access, from both a provider and consumer viewpoint, especially to the local level. Anecdotal information provides snapshots across Maryland of numerous biases and beliefs which affect both the provider's willingness to give care and the consumer's utilization of needed services, but no system currently exists to fully capture this important information.



Available information indicates that the State of Maryland, as a whole, has a number of access issues. It is very difficult to demonstrate through the maze of available data, from both public and private sources, exactly what the most important access issues are, both to Maryland as a state and to its varied regions. Accounting for regional/local variations in assessing health care needs to be a vital part of any strategic planning meant to improve access on a statewide level.

## Determinants

### Health Insurance

Lack of health insurance coverage may be the strongest indicator of inferior access to health care. Nationally, the Current Population Survey estimates that 44.3 million people, nearly one in six, did not have health insurance as of March, 1999. The number of uninsured has been increasing by about one million per year since 1980. Behavioral Risk Factor Surveillance System data for 1998 estimates national uninsurance rates among non-elderly adults from a high of 23.6% in Texas to a low of 5.9% in Hawaii.

Data show that those without health insurance use fewer health care services, are less likely to have a usual source of health care, and are more likely to be unable to obtain needed care or to forego care or needed prescriptions.

Uninsured does not necessarily mean unemployed. In general, the primary source of health insurance for Americans is the place of employment. According to a recent survey by the United States Department of Health and Human Services, seven out of eight uninsured in the nation live in families with at least one working adult. More than two-thirds of persons in the United States under age 65 have access to employer-sponsored health insurance either directly through their own employers or indirectly as dependents of family members who are offered insurance by their employer. Of those who do have access to employer-based health insurance, 14% are not enrolled, according to a Health System Change Survey from 1997-1998. Data from this survey also show that most of those people not enrolled in offered insurance plans (two-thirds) have other coverage, both public or private-sponsored health insurance. The remaining one third, or 5% of all persons with access to employer-based health insurance, are not enrolled. This 5% represents 7.3 million uninsured people, or about 20% of all uninsured, including 2.2 million children.

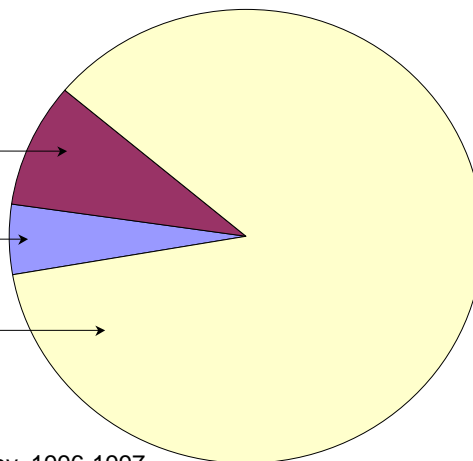
<b>HEALTH CARE ACCESS SAMPLING OF STATE DATA</b>		
<i>Do You Have Any Kind of Health Care Coverage?</i>		
	<b>Yes</b>	<b>No</b>
<b>Nationwide</b>	<b>87.0</b>	<b>13.0</b>
Delaware	92.0	8.0
District of Columbia	88.4	11.6
Hawaii	94.1	5.9
<b>Maryland</b>	<b>86.4</b>	<b>13.6</b>
Pennsylvania	89.2	10.8
Texas	76.4	23.6
Virginia	87.8	12.2
<b>Source: Behavioral Risk Factor Surveillance System, 1998</b>		
<b>Note: Expressed as % of survey answers; ages 18-64.</b>		

### Health Insurance Choices for Persons with Access to Employer-Sponsored Coverage

Do not enroll in employer-sponsored coverage but obtain other coverage - 9%

Do not enroll in employer-Sponsored coverage and are uninsured - 5%

Enroll in employer-sponsored coverage - 86%



Source: HSC Community Tracking Study, Household Survey, 1996-1997

## Access to Health Care in Maryland

### Ability to Pay for Care

Maryland's statistics are slightly better than those of the nation as a whole. The Maryland Health Care Commission has calculated three year averages for the uninsured in Maryland, using Current Population Survey data. These data demonstrate that the Maryland uninsurance rate has remained fairly constant since 1995 at between 13% and 14%. This represents approximately 700,000 people. While better than the national three year average of approximately 16%, this does mean that close to one in seven Marylanders have no health insurance coverage.

An analysis of the Maryland Behavioral Risk Factor Surveillance Survey data for 1996 and 1997 by the Maryland Health Care Commission (ages surveyed: 18 to 64) demonstrated that two-thirds of those surveyed who had no health insurance were employed. Although lower levels of income are associated with greater risk of having no health insurance, nearly one quarter of the uninsured reported household incomes of \$25,000-\$34,999, and 15% of uninsured adults have household incomes of \$50,000 or more.

The presence of health insurance does not ensure adequate coverage for some necessary services. The number of underinsured can also impact utilization of preventive and post-acute services, such as general screening, physical and occupational rehabilitation, mental health and substance abuse counseling and therapy, and prescription drug affordability.

### Availability of Services

A continual source of care is one of the most important ways to improve primary care. The benefits of a continuum of health services, which can be provided and managed by a primary source of care, place needed emphasis on preventive services, and efficient delivery of care.

While national statistics place Maryland, as a whole, in a very favorable light for adequacy of primary care providers, there exist many pockets of underserved populations across the State which lack access to “willing providers,” both primary and various speciality providers. The advent of managed care organizations, especially for the Medicaid population, has adversely influenced some providers’ willingness to provide services and also to agree to take consigned fees for services given to their Medicaid patients.

### **Social and Cultural Barriers**

While the availability of health insurance, and the ability to utilize primary care when needed, are major determinants in assuring access to health care, there are many other factors that may influence and inhibit access to care. Lack of cultural competence on the part of providers, consumers’ inability to understand the health care system, lack of transportation and appropriate hours for services, inappropriate and ineffective outreach programs, and lack of focus on preventive services all contribute to both decreased access to and decreased utilization of health care resources.

### **Disparities**

In Maryland, minorities are twice as likely to be uninsured as white, non-Hispanic residents. At all income levels, minority groups comprise a higher percentage of uninsured. More than half of all adults in Maryland who are uninsured are between the ages of 18 and 34. While these young adults comprise 13% of the adult population in Maryland, they account for 25% of uninsured adults.

**Objective 1** - By 2003, incorporate into existing reporting requirements, quantification of access to health care among residents of Maryland, to the county level. (Baseline - developmental)

### **Action Steps**

The Department of Health and Mental Hygiene will:

- ⇒ Establish a Task Group to direct examination of access to health care in Maryland. This examination will include *all* aspects of access and utilization of health care services, and include an examination of the feasibility to develop local level data.
- ⇒ Identify and coordinate Task Group efforts with existing partners, public and private, who have roles in collection and dissemination of data related to access to health care in Maryland.
- ⇒ Recommend and recruit the appropriate state agencies to collect and analyze information on access and utilization of health care, as directed by the Task Group.
- ⇒ Utilize existing data collection where possible.

**Examples:**

Survey of local providers, consumers and appropriate stakeholders regarding insurance status, barriers to care, beliefs/values about preventive care, etc.

Catalogue existing access resources, e.g. pro bono services, in kind services, volunteer organizations, subsidized care, plans to provide universal access, and federal and state resources.

The Health Care Access Task Group will:

- ⇒ Publish at least one compendium of data, related to existing data on access measures in Maryland, and including data at the local level.
- ⇒ Publish a report to identify “shortfalls” and gaps in information collection systems on access to health care in Maryland, and provide remedial strategies for collection of missing information.
- ⇒ Publish a Task Group report, which will identify and prioritize target populations, critical access issues, and barriers to achieving universal access and utilization of health care for all Marylanders, based on the analysis of information from the designated state agencies.

**Objective 2 -** By 2006, develop and publish a strategic plan that includes measurable objectives for improving access deficiencies among all Marylanders as documented in the Health Care Access Task Group Reports. (Baseline: No comprehensive plan of this type existed in 2001.)

**Action Steps**

The Department of Health and Mental Hygiene, in coordination with the Health Care access Task Group, will:

- ⇒ Research and identify relevant health care access, enhancing “best practices” in Maryland and in other states for possible replication in appropriate regions of Maryland.
- ⇒ Support development of consensus within the Health Care Access Task Group on selection of appropriate strategies in Maryland and from other states for adoption, with any needed revisions, and implementation across Maryland.

**Objective 3 -** By 2010, report on progress in improving access to health care across the State. (Baseline: Language in this objective will be revised to provide a measurable basis consistent with objectives that will be included in the 2006 strategic plan and also documented access shortfalls compiled by various agencies in 2003.)

## Partners

Maryland Community and Public Health Administration, DHMH • Maryland Department of Health and Mental Hygiene (DHMH) • Maryland Health Care Commission • Maryland Local Health Departments • Maryland Medical Care Program, DHMH • Office of Health Policy, DHMH • Office of Primary Care Services, DHMH • Office of Public Health Assessment, DHMH

## References

- Health Insurance Association of America. (1999, December 8). "55 million Americans will lack health insurance by 2008." Press release. Available: <http://www.hiaa.org/news/news-current/press-releases/release121.html>.
- Maryland Department of Health and Mental Hygiene; Office of Planning, Development, and Finance. (1997). *The year in review: Maryland medical care programs*. Available: <http://www.dhmf.state.md.us/hsaea>.
- Maryland Health Care Commission. (1998). State health care expenditures. *Annual report on expenditures and utilization*. pp. 19-41. Available: <http://www.mhcc.state.md.us/database/98annualrpt/toc.html>.
- Maryland Health Care Commission. (1999, October). *Health insurance coverage in Maryland adults: Demographic, health status, and access to care differences*. Analysis by the Maryland Health Care Commission of Maryland Behavioral Risk Factor Surveillance System (BRFSS) data.
- Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. (1999, October). *Behavioral risk factor surveillance system: 1996 - 1997*.
- U.S. Census Bureau. (1999, March). *Current Population Survey*.

### Cross-Reference Table for Access to Health Care

#### See Also

Allegany County .....	144
Anne Arundel County .....	152
Baltimore County .....	158
Carroll County .....	172
City of Baltimore .....	296

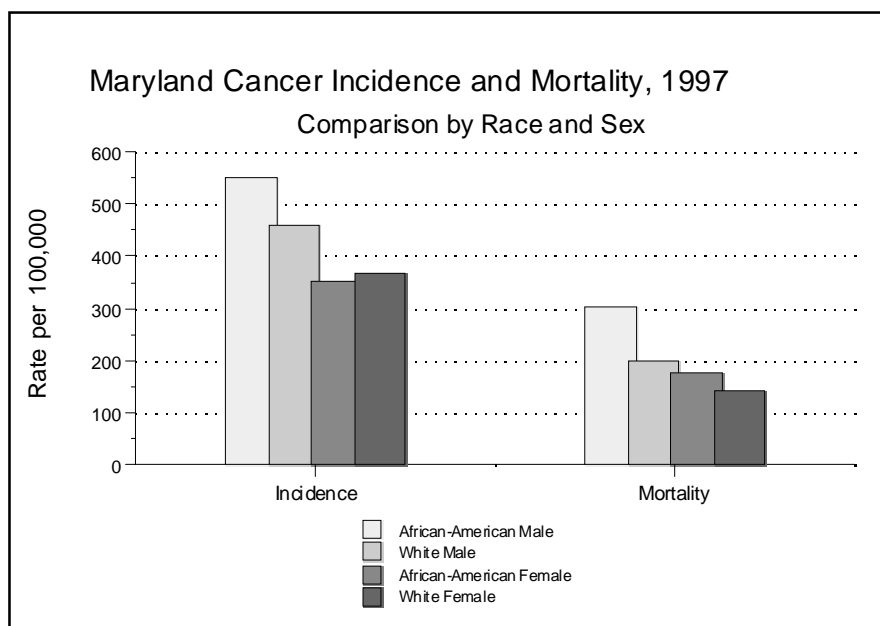
# CONQUERING CANCER IN MARYLAND



## Problem

Cancer is the second leading cause of death in Maryland. In 1998, Maryland had the eighth highest cancer death rate compared to other states in the nation. One in every five deaths in Maryland is due to cancer. Overall cancer mortality had been level for many years in both the U.S. and Maryland until 1990, when the overall cancer death rate started to decline in both the U.S. and Maryland. The cancer mortality rate in Maryland has been significantly higher than the U.S. and is above the rate for the U.S. Healthy People 2010 objective.

In 1997, 24,305 Marylanders were diagnosed with cancer, and 10,092 Maryland residents died of cancer. The incidence of cancer overall is higher among African-American males than white males; white females have a higher incidence of cancer than African-American females. Overall cancer mortality is higher among African-American males and African-American females than among white males and white females, respectively.



**Source:** Maryland Cancer Registry, 1997

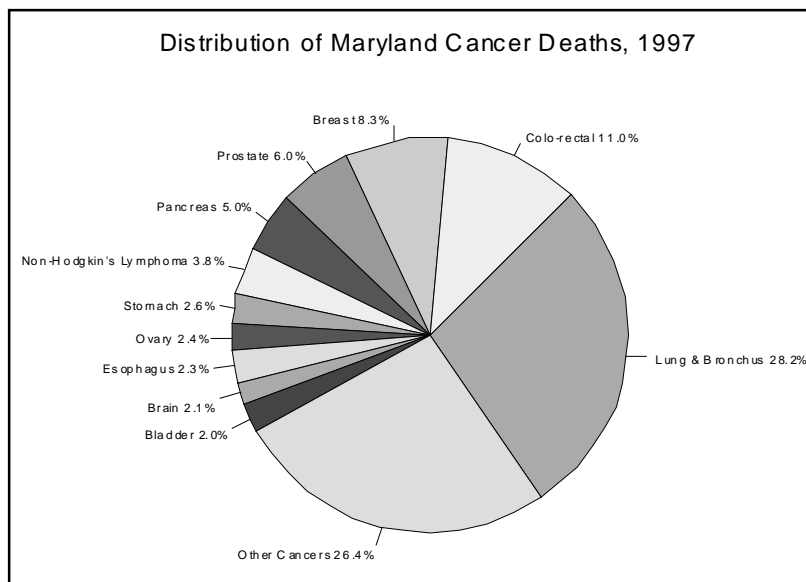
Note: Rates per 100,000; Age-adjusted to 1970.

## Determinants

Most cancer deaths in Maryland are lung, colon and rectum, breast, and prostate cancer. In 1997, Maryland has the 17th highest lung cancer mortality rate, the 3rd highest colon and rectum mortality rate, the 7th highest breast cancer mortality rate, and the 9th highest prostate cancer mortality rate compared to other states in the nation. The seven most commonly diagnosed cancers in Maryland are cancers of the breast, prostate, lung and bronchus, colon and rectum, bladder, melanoma of the skin, and oral cavity and pharynx.

In 1997, 17 of 24 jurisdictions in Maryland had cancer mortality rates that were higher than the nation, eleven of which had overall cancer mortality rates that were significantly higher than the U.S. rates. These jurisdictions include Baltimore City and Anne Arundel, Baltimore, Cecil, Charles, Dorchester, Harford, Prince Georges, St. Mary's, Somerset, and Wicomico counties.

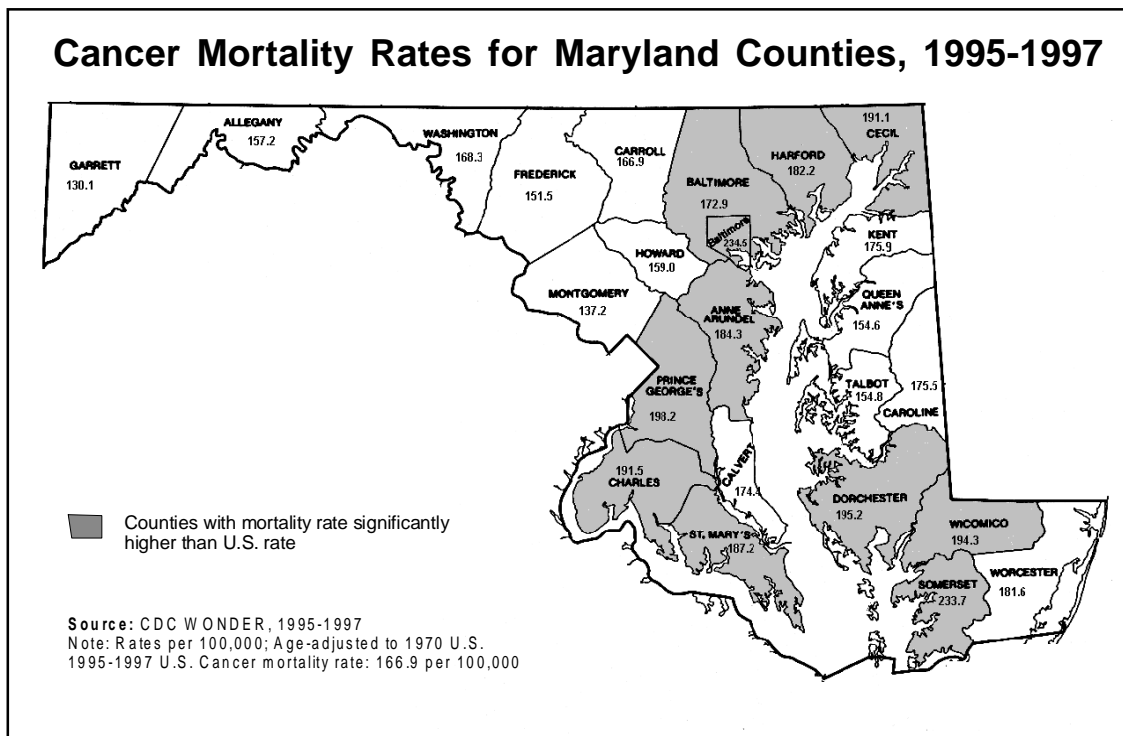
Controlled clinical trials demonstrated that mortality from colorectal and breast cancer can be reduced with early detection. Screening for cancer of the oral cavity and skin can also detect cancer at an early, treatable stage. Screening of cervical cancer can detect precancerous changes on the cervix and completely avoid development of invasive cervical cancer. Implementing early detection programs for these cancers can have a significant impact on reducing mortality.



Source: Maryland Cancer Registry, 1997

There is currently no cost-effective method to detect lung cancers at an early stage; therefore, the best intervention to reduce deaths due to lung cancer is tobacco use prevention and cessation.

The major risk factor in the development of skin cancer is exposure to the sun or ultraviolet light. Skin cancers can be prevented by limiting exposure to the sun and artificial sources of light and by protecting the skin from the sun. A diet high in fiber, fruits, and vegetables and low in fat may reduce the risk of developing colon and some other cancers. Encouraging the public to adopt these dietary behaviors could reduce the incidence of certain cancers.



During its 2000 session, the Maryland legislature established the Cigarette Restitution Fund Program (CRFP) in the Department of Health and Mental Hygiene. The CRFP is leading the State’s efforts to control cancer in coordination with a broad array of statewide and local cancer control advocates.

**Objective 1** - By 2010, to reduce cancer deaths to a rate of no more than 103 per 100,000 persons.

**Objective 2** - By 2010, to eliminate the disparity in cancer deaths between ethnic minorities and whites and between rural and urban geographic areas.

**Action Steps**

- ⇒ Prevent the use of tobacco products among children, and decrease smoking among both children and adults.
- ⇒ Increase early detection and treatment of colon, breast, prostate, cervical, oral, and skin cancer.
- ⇒ Promote diets high in fiber, fruits and vegetables and low in fat.
- ⇒ Promote skin cancer prevention by limiting exposure to the sun and artificial sources of light and by protecting the skin from the sun.
- ⇒ Focus initiatives on education, screening, early diagnosis, treatment and supportive care among ethnic minorities, and rural and medically underserved communities.

**Partners**

American Lung Association of Maryland • Cancer Advocacy Groups • Center for Cancer Surveillance and Control, DHMH • Centers for Disease Control and Prevention • Johns Hopkins University Medical Systems • Maryland Chapter of the American Cancer Society • Maryland community hospitals • Maryland Department of the Environment • Maryland Department of Health and Mental Hygiene (DHMH) • Maryland General Assembly • Maryland Local Health Departments • Med Chi—the Maryland State Medical Society • National Cancer Institute, National Institutes of Health • University of Maryland Medical Systems

Cross-Reference Table for Cancer	
See Also	
Cecil County .....	180



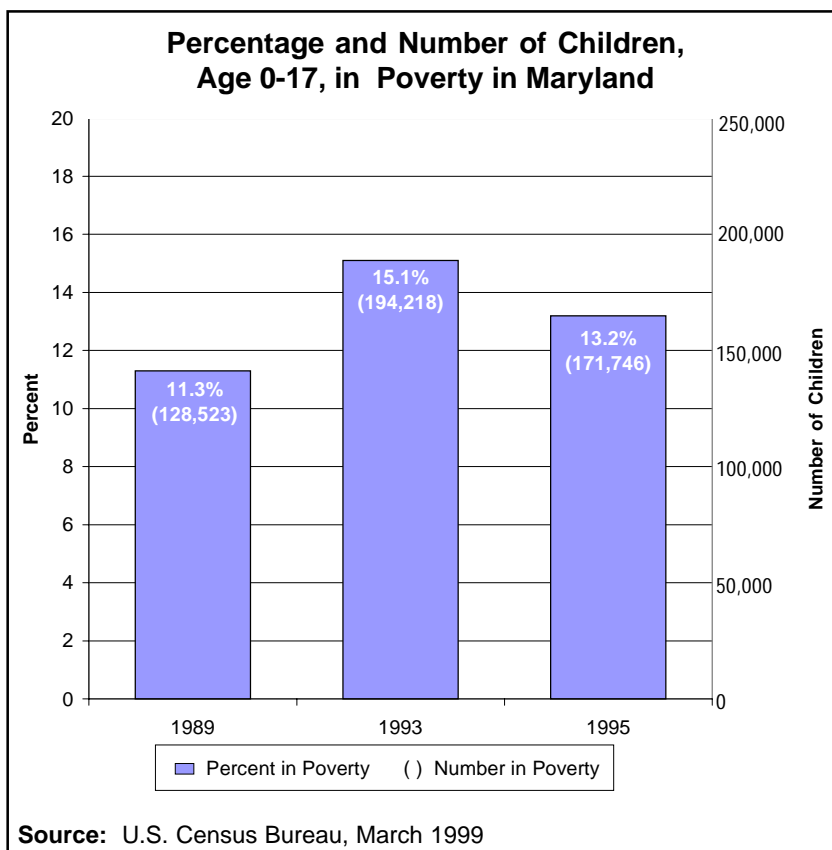


# CHILD AND ADOLESCENT HEALTH

## Overview

Maryland's 1.4 million children and adolescents are its most important and precious resource. During the late 1990s, several reports documented improvements in the health of Maryland's children, such as declining teen pregnancy rates and increasing immunization rates. There is every reason to expect that most of Maryland's children will grow up to become healthy and productive members of society. However, available data also suggest there are troubling trends and challenges that could block the attainment of a healthy future for many of Maryland's children and adolescents. Most at risk are children who grow up in poor, minority, and disadvantaged families and communities.

In the *1999 Kids Count Data Book* published by the Annie E. Casey Foundation, Maryland, one of the nation's wealthiest states, ranked 24<sup>th</sup> on 10 indicators of child well-being. At least 12% of Maryland's children were defined to be living in families at high risk for future failure as measured by six indicators including poverty and lack of health insurance coverage. According to the U.S. Census Bureau, 13.2% of Maryland children and adolescents, ages birth to 17 years, lived in poor families in 1995. Poverty among Maryland children and adolescents increased by 17% between 1989 and 1995. The poverty rate among African-American and Hispanic children in Maryland was two to three times the rate for white children. The consequences of child poverty are severe. Poor children are known to have higher death rates, increased chronic diseases such as asthma, and less access to health care services. Approximately 13% of Maryland children and adolescents were uninsured in 1997. Uninsured children are less likely to have access to a medical home, and less likely to use health services.



Morbidity and mortality indicators provide a snapshot view of the health status of children and adolescents in Maryland. In 1997, 230 Maryland children between the ages of 1 and 14 died. Injuries, many of them preventable, were the leading cause of death for this age group followed by cancer. There were 248 deaths to Maryland adolescents ages 15 to 19 in 1997. Injuries, homicide, suicide, and motor vehicle accidents were the primary causes of these adolescent deaths. Two environmentally-linked health conditions, asthma and lead poisoning, are major causes of childhood morbidity. According to the American Academy of Pediatrics, obesity and obesity-related illnesses, such as diabetes, are increasing among children and adolescents. In addition, there are a number of psycho-social and behavioral issues that determine the health of children and adolescents. These include mental and emotional disorders, crime, violence, risky behaviors such as substance use, and sexual activity.

The following pages identify five of the major health challenges confronting Maryland children, adolescents, and families in the new millennium. It is by no means an exhaustive list, but rather meant to focus attention on several high priority problems and goals believed to be of prime importance in improving the health of Maryland's children and adolescents.

Additional health issues and concerns that are germane to improving the health of children and adolescents are covered in other sections of the HIP. These areas include Infant Mortality, Infrastructure Activities, Injuries, Mental Health Issues, Oral Health, and Substance Abuse.

## **Partners**

Note: The following list is not exhaustive, but includes several of the major partners in Maryland working to improve the health of adolescents and children as discussed in the five modules included in this section.

American Lung Association of Maryland • Center for Maternal and Child Health, DHMH • Johns Hopkins University • Maryland Association of County Health Officers • Maryland Chapter of American Academy of Pediatrics • Maryland Department of the Environment • Maryland Department of Health and Mental Hygiene (DHMH) • Maryland Department of Housing • Maryland Department of Human Resources • Maryland Hospital Association • Maryland Local Health Departments • Maryland Local Management Boards • Maryland Medical Assistance Program, DHMH • Maryland Office of Children, Youth, and Families • Maryland State Department of Education • University of Maryland Health Systems

## Focus Area 1 - Preventing Asthma

### Problem

Asthma is a chronic inflammatory lung disease characterized by recurrent episodes of breathlessness, wheezing, coughing and chest tightness. According to the Centers for Disease Control and Prevention (CDC), approximately 7.3% of U.S. children were affected by asthma in 1995. Applying national prevalence rates to Maryland, an estimated 95,000 Maryland children and adolescents have asthma. National survey data indicate that the number of children with asthma in the U.S. has more than doubled in the past 15 years. Respiratory conditions including asthma are one of the highest ranked causes of pediatric hospitalizations in Maryland. The American Lung Association notes that asthma is one of the most common chronic illnesses of childhood and the number one cause of school absenteeism. In a 1996 Department of Health and Mental Hygiene (DHMH) survey to determine the special health care needs of school-aged children in Maryland, asthma was the most frequently identified health condition.

Nationally, the number of deaths, hospitalizations and emergency room visits attributed to asthma has been increasing. The incidence of new asthma cases is highest among children younger than five years of age. A number of factors are thought to have led to rising asthma prevalence, morbidity, and mortality rates. These include: limited access to quality care; lack of asthma management skills among providers, patients and families; increasing exposure to environmental allergens and irritants; and changes in diagnostic practices, medical coding, and reimbursement procedures.

**Asthma Hospitalization Rates for Children ages 0-14 by Race in Maryland, 1997**

<u>Age/Race</u>	<u>Number of Discharges</u>	<u>Population*</u>	<u>Rate/10,000</u>
All Children, 0-14	3,366	1,076,029	31.3
0-4	1,874	347,725	53.9
5-14	1,492	728,304	20.5
African-American Children, 0-14	2,015	339,828	59.3
0-4	1,058	112,815	93.8
5-14	957	227,013	42.2
White Children, 0-14	1,242	686,551	18.1
0-4	737	217,765	33.8
5-14	505	468,786	10.8

**Source:** Discharges – Unpublished data derived from the Maryland Health Services Cost Review Commission discharge file for 1997 and compiled by the DHMH Office of Public Health Assessment.

\*U.S. Census Bureau/NCI/Health Statistics, estimates, July 1, 1997.

Asthma is a controllable disease whose severity can be reduced through the use of medications and by controlling exposure to environmental triggers. The National Institutes of Health (NIH) has developed clinical practice guidelines for the diagnosis and management of asthma. Although effective preventive therapies for the control of asthma are now available, many children with asthma continue to receive episodic care from providers who are either unaware of or fail to follow NIH guidelines. The NIH has also stressed the importance of asthma education for both patients and health professionals as a means to improve health outcomes for asthma.

## **Determinants**

Childhood asthma is a disorder with genetic predispositions and a strong allergenic component. According to the American Lung Association, approximately 75% to 80% of children with asthma have significant allergies. Major allergens include dust mites, pet dander, molds, and cockroach excrement. Exposure to passive tobacco smoke contributes to the onset of asthma early in life and is a risk factor for asthma morbidity. Children with asthma who are exposed to passive tobacco smoke have been shown to have increased emergency room visits, impaired lung function, and a higher requirement for medications. Other asthma triggers include outdoor air pollution and upper respiratory viral infections.

## **Health Disparities**

Nationally, the death rate from asthma in African-American children is four times the rate in white children. In 1997, Maryland's asthma hospitalization rate was 32 per 10,000 for children ages birth to 14 years. The hospitalization rate for asthma in African-American children (60 per 10,000) was more than three times the rate in white children (18 per 10,000).

Asthma morbidity and mortality disproportionately affect poor children living in the inner cities of urban areas. Allergens associated with dust mites and cockroaches play important roles in asthma morbidity among inner city children who are chronically exposed to these agents. Other contributors to higher rates in inner city areas include less access to appropriate health care resulting in inadequate preventive care for asthma management, and a lack of asthma knowledge and management skills among families and primary health care providers.

**Objective 1** - By 2010, reduce asthma morbidity as measured by a reduction in the asthma hospitalization rate for children ages 0 to 14 to no more than 25 per 10,000. (Maryland Baseline: 32 per 10,000 in 1997)

### **Action Steps**

- ⇒ Implement a multi-media campaign to raise public awareness, understanding, and preventative measures for asthma and asthma triggers for children.
- ⇒ Distribute copies of updated National Institute of Health (NIH)/National Asthma Education and Prevention Program (NAEPP) asthma guidelines to Maryland primary health providers involved with children.

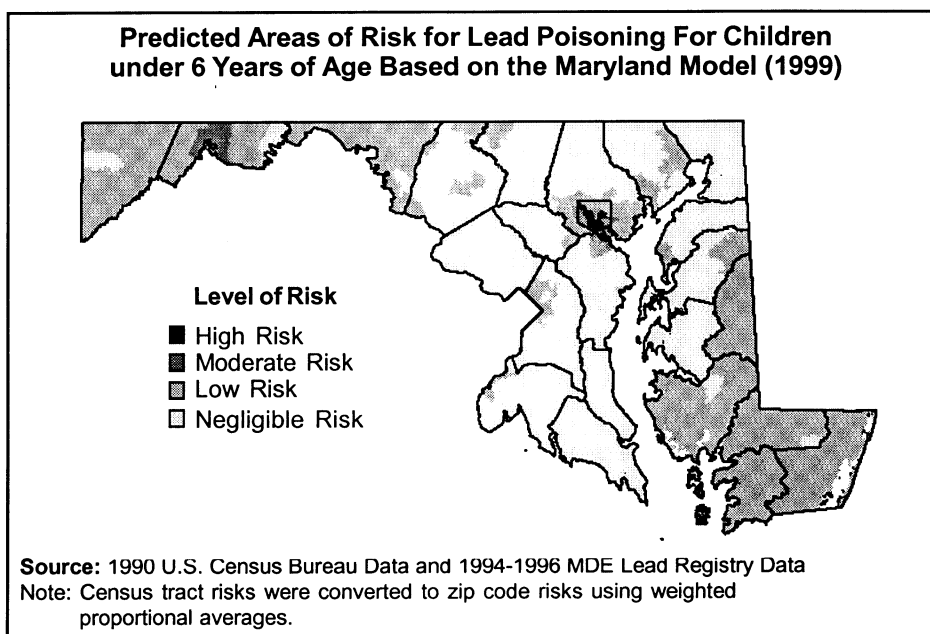
- ⇒ Work with the American Academy of Pediatrics and other groups to assess and monitor use of NIH asthma management guidelines by providers. Promote the use of the NIH asthma guidelines for children.
- ⇒ Implement school-based asthma education programs to educate patients, families and schools to better manage asthma according to current guidelines. Target school-based and other educational programs to communities at highest risk.
- ⇒ Convene a strategic planning group to design and implement a statewide asthma surveillance system.
- ⇒ Promote coordination and partnership among the organizations and systems that address the causes, prevention, and management of asthma in children.

## Focus Area 2 - Preventing Childhood Lead Poisoning

### Problem

Lead is a biochemical poison that affects a number of organ systems, including the central nervous system. Sustained exposure to lead can cause long lasting neurological damage, learning disabilities, shortened attention span, behavior problems, growth delays in young children and lowered IQ. Children absorb more lead and are more sensitive to its effects than adults. A report released by the Maryland Department of the Environment (MDE) in January of 2000 shows that childhood lead poisoning (defined as a venous or capillary blood lead level greater than or equal to 20 ug/dL) is a serious, but preventable health problem that affected 772 Maryland children in 1998 alone. An additional 4,300 children were diagnosed with elevated blood lead levels (defined as a venous or capillary blood lead level greater than or equal to 10 ug/dL).

Screening children for lead poisoning will remain an essential activity until the goal of primary prevention is achieved (eliminating hazards so that children are no longer exposed to lead). Diagnosis and subsequent treatment is best accomplished by screening children with a blood lead test. However, few Maryland children are currently being screened. The 2000 MDE report also shows that in 1998, 13.9% of Maryland children under age six were tested for lead poisoning. Screening rates varied by jurisdiction from a high of 31.2% in Baltimore City to a low of 4.1% in St. Mary's County. Approximately 10% (5,068) of Maryland children tested for lead poisoning were found to have elevated blood lead levels.



### Major Determinants

Poverty and residence (or child care) in homes with deteriorated or disturbed lead-based paint are major risk factors for lead exposure and poisoning. Ingestion of lead primarily occurs among young children exposed to chipped and peeling lead-based paint on windowsills and porches in homes built before 1978. Children are at greatest risk from birth to age six. According to the 1990 U.S. Census, there are about 529,000 Maryland homes built before 1950 (95% likely to contain lead paint) and 976,000 homes built between 1950 and 1978 (75% likely to contain lead paint). Therefore, more than 1.2 million Maryland homes are potential sources of lead exposure.

## Health Disparities

Poor children living in substandard housing with chipped and peeling lead-based paint and located in areas with older housing stock are more likely to have elevated blood lead levels than their counterparts. In 1998, more than 80% of children in the State found to be lead-poisoned lived in Baltimore City.

Legislation passed during the 1998 Maryland General Assembly Session required DHMH to develop a methodology for identifying areas of high risk for childhood lead poisoning in Maryland. As a result a *Targeting Plan for Areas of High Risk for Childhood Lead Poisoning* was developed by DHMH in 2000. This *Targeting Plan* defines 46 census tracts in the State to be at “high risk” for elevated blood levels among children under age six. All 46 of the “high risk” census tracts are located in Baltimore City. The Eastern Shore and Western Maryland also have significant concentrations of areas of risk for childhood lead poisoning.

**Objective 1 -** By 2010, increase screening of children under the age of six by blood lead tests in areas of high risk for childhood lead poisoning to 100%. (Maryland Baseline: 13.9% screened statewide in 1998; 31.2% screened in Baltimore City in 1998)

**Objective 2 -** By 2010, eliminate elevated blood lead levels in children. (Maryland Baseline: approximately 10% of children screened in 1998)

### Action Steps

- ⇒ Assist families and providers with identifying and assessing resources and services for lead abatement.
- ⇒ Develop a culturally competent statewide campaign to raise general public awareness about lead hazards and the importance of timely screening for lead poisoning in young children.
- ⇒ Improve outreach and screening for elevated blood lead in children under age six.
- ⇒ Promote universal venous blood testing for lead at 12 and 24 months of age in areas of low, moderate, and high risk as defined in the DHMH childhood lead targeting plan. Assess risk for lead exposure, by questionnaire, in areas of negligible risk as defined in the DHMH childhood lead screening targeting plan.
- ⇒ Increase health care provider education to help minimize confusion about federal and state guidelines regarding lead screening testing requirements and recommendations.
- ⇒ Promote coordination and collaboration among organizations and systems working to prevent lead poisoning among children.

## **Focus Area 3 - Promoting Good Nutrition and Physical Activity in Children**

### **Problem**

Good nutrition and physical activity are essential for optimal growth and development, health, and well-being. In the late 1990s, results of several studies indicated that children and youth are eating less well-balanced diets and becoming more sedentary. This has resulted in greater numbers of overweight youth and youth who exhibit early signs of nutritional imbalance such as diabetes, high cholesterol levels, and hypertension. Data from the CDC show that the percentage of children and adolescents who are overweight more than doubled between 1970 and 2000. About 12.5% of U.S. young people age 6 to 17 years are seriously overweight. Obese children are more likely to become obese adults. Overweight adults are at increased risk for heart disease, high blood pressure, stroke, diabetes, some types of cancer, and gallbladder disease.

Dietary factors contribute substantially to preventable illness and premature death in the United States. Four of the ten leading causes of death—coronary heart disease, stroke, some types of cancer, and type 2 diabetes—are associated with dietary factors. The establishment of healthy nutritional patterns and behaviors should start during childhood and be maintained throughout the life cycle. The 1995 *Dietary Guidelines for Americans* recommend that persons age two years and older should eat a variety of foods, maintain or improve body weight by balancing food intake with physical activity; and choose a diet that is plentiful in grain products, vegetables, and fruits; moderate in salt, sodium, and sugars; and low in fat and cholesterol.

Physical activity among children and adolescents is important because of the related health benefits (cardiorespiratory function, blood pressure control, and weight management) and because a physically active lifestyle adopted early in life may continue into adulthood. Many children are less physically active than recommended, and physical activity declines during adolescence. Data from the Third National Health and Nutrition Examination Survey for 1988-1994 document that one quarter of U.S. children spend four hours or more watching television daily. These findings highlight the need for parents, educators, and health care providers to become positive role models and to be involved actively in the promotion of physical activity and fitness in children and adolescents.

### **Health Disparities**

Overweight and obesity are multi-factorial in origin, reflecting inherited, metabolic, behavioral, environmental, cultural, and socio-economic conditions. They are particularly prevalent in minority populations, especially among minority females. The percentage of the population reporting no leisure-time physical activity is higher among women (43%) than men (36%), among African-Americans (52%) and Hispanics (54%) than whites (38%), and among high school graduates (46%) than college graduates (24%).



**Objective 1 -** By 2010, reduce the prevalence of overweight and obesity among children and adolescents. (U.S. baseline: 11% of 6-19 year olds in 1988-94; 2010 target: 5%; No baseline data for Maryland)

**Objective 2 -** By 2010, increase to at least 30% the proportion of school-aged children and adolescents who engage in moderate physical activity for at least 30 minutes on five or more of the previous seven days. (U.S. Baseline: 21% of young people in grades nine through 12 in 1995; No baseline data for Maryland)

### **Action Steps**

- ⇒ Develop a culturally-competent statewide campaign to promote healthy nutritional habits among children, adolescents, and families. Promote the findings from the 1995 report on dietary guidelines for Americans. Target communities at highest risk.
- ⇒ Develop a statewide campaign that promotes the importance of physical activity among children and adolescents and discourages sedentary activities.
- ⇒ Provide educational opportunities for all school system personnel to become knowledgeable about meals and snacks that are age-appropriate.
- ⇒ Collaborate with local school systems in the development of nutritionally well-balanced meals and snacks in the school setting.
- ⇒ Collaborate with local school systems to increase the participation of students in regular physical education activities in schools.

## Focus Area 4 - Improving Access to Health Care for Adolescents

### Problem

Adolescence, the transition from childhood to adulthood, is a complex period of accelerated growth and change characterized by numerous physical, cognitive, social, and emotional changes. Adolescence is a period of experimentation and risk-taking. There are more than 525,000 adolescents, between the ages of 12 and 19, in Maryland. Another 144,000 children, between the ages of 10 and 11, comprise the pre-adolescent group.

Adolescent health issues are primarily psycho-social rather than physical. Unintended pregnancy, sexually transmitted diseases, depression, violence, and substance abuse are some of the health problems faced by increasing numbers of adolescents from all segments of society. For example, national data indicate that up to 30% of adolescents suffer from depression and rates of several sexually transmitted infections are higher among adolescents than any other age group. Approximately 75% of adolescent deaths are caused by preventable social morbidities: unintentional injuries, homicide, and suicide. Health beliefs, attitudes and behaviors acquired during adolescence set the stage for health-related behaviors in later life.

**Estimated Numbers of Adolescents, ages 10-19, in Maryland by Region, 1997**

<u>Region</u>	<u>Number</u>	<u>Percent</u>
Total	676,440	100.0%
Western Maryland	56,320	8.3%
Baltimore Metro Area	321,610	52.6%
National Capital Area	206,800	30.6%
Southern Maryland	41,350	6.1%
Eastern Shore	50,450	7.4%

**Source:** *Maryland Vital Statistics Annual Report, 1997. Table 4.*

Historically, adolescents have used fewer primary care services as compared to all other age groups in the U.S. A lack of health insurance coverage often served as a major barrier to care. In 1998, the U.S. Census Bureau's Current Population Survey estimated that 16% of adolescents between the ages of 12 and 17 were uninsured. Until the advent of the Maryland Children's Health Program (MCHP), many low-income adolescents lacked access to health insurance coverage. Other barriers to access to care for adolescents include: 1) lack of a "medical home"; 2) lack of service delivery systems designed to address the unique needs of adolescents; 3) a shortage of providers trained in adolescent health; and 4) a lack of family involvement. There is a need to create "adolescent friendly" systems of care that include programs that are developmentally and culturally appropriate and staffed by health professionals who are skilled in the unique health needs of adolescents.

Parents and caregivers play a crucial role in ensuring that adolescents access health care in a consistent and appropriate manner. Throughout the teen years, children are dependent on adults to ensure health care coverage, make and keep appointments, and follow primary regimens.

MCHP provides health insurance for adolescents in families with incomes under 300% of the poverty level who are not eligible for Medicaid. Yet, there are some families that are eligible for neither public or private forms of health insurance coverage. It is important for parents/care givers to receive outreach and information services and to be informed of the available resources and the appropriate manner in which to access services.

In the past, many adolescents received primary and other health care services at local health departments at reduced or no cost. These services often served as an important source of care for uninsured or underinsured adolescents. As fewer direct and “gap-filling” services are provided by local health departments, adolescents will need other appropriate sources of care.

## **Health Disparities**

African-American, American Indian, and Hispanic adolescents were more likely to be poor than white or Asian adolescents according to data from the 1990 U.S. Census for Maryland. Poverty correlates with lessened access to and use of health care insurance and services. According to the 1998 Current Population Survey, Hispanic, African-American and Asian children (ages 0 to 17) were more likely to be uninsured than white children.

**Objective 1** - By 2010, increase the proportion of adolescents with health insurance coverage to 100%. (U.S. Baseline: 16% of adolescents between the ages of 12 and 17 were uninsured in 1998; No baseline data for Maryland)

**Objective 2** - By 2010, increase to at least 95% the proportion of children and adolescents who have a designated medical home. (Baseline: developmental)

## **Action Steps**

- ⇒ Develop a methodology to estimate the number of uninsured adolescents in Maryland.
- ⇒ Increase the number of health professionals trained to provide adolescent-oriented health services.
- ⇒ Develop “adolescent-oriented” service systems within each region of the State to address the unique needs of adolescents.
- ⇒ Expand outreach and education programs to improve awareness of available public health insurance programs for adolescents and increase enrollment. Educate parents/caregivers and adolescents in accessing various health programs and services (enrollment procedures, etc.).
- ⇒ Coordinate outreach and support efforts of MCHP to improve access to health care for adolescents.

## Focus Area 5 - Improving the Service System for Children with Special Health Care Needs (CSHCN)

### Problem

Children with special health care needs (CSHCN) are defined as children who have or are at risk for a chronic physical, developmental, behavioral, or emotional condition and who require health care. Approximately 171,000 children in Maryland have serious, ongoing physical health conditions. According to the 1994-95 Disability Survey conducted by the National Center for Health Statistics, approximately 15-18% of the child and adolescent population has special health care needs. While all special needs children have the same concerns as other children, special needs children also have unique health issues that must be addressed.

#### Estimated Numbers of Children with Special Health Care Needs by Region

<u>Region</u>	<u>Number</u>	<u>Percent</u>
Total	183,644	100.0%
Western Maryland	14,398	7.8%
Baltimore Metro Area	91,707	49.9%
National Capital Area	57,084	31.1%
Southern Maryland	10,497	5.7%
Eastern Shore	9,958	5.4%

**Source:** Ireys, Henry and Kenneth Kolodner. (1997, November). *Estimating the State and County Prevalence of Children with Special Health Care Needs: A Technical Study for the Children's Medical Services Program. November, 1997.* Estimates derived from national data available through the Childhood Disability Supplement of the 1994-95 National Health Interview Survey.

Children with special health care needs and their families often require a range of specialized health and health-related services. These include preventive, primary and specialty medical services; specialized diagnostic and therapeutic services; rehabilitation services; early intervention services; and enabling services such as transportation and family support. Historically, services for special needs children have been difficult for families to access and for providers to coordinate. A lack of knowledge of comprehensive needs and corresponding community-based resources and payment mechanisms present challenges for both families and providers.

A 1998 analysis of Maryland's health care delivery system for special needs children prepared for the Office of Children's Health identified the following as major gaps and needs:

- Limited access to specialty care services, particularly in some rural areas.
- Limited access to enabling and family support services such as respite care, child care, and transportation.
- Barriers to care that include differing eligibility criteria, duplication and gaps in services, inflexible funding sources, and poor coordination among service sectors.

**Objective 1** - By 2010, increase the proportion of local and/or regional areas in Maryland that have comprehensive service systems that include population-based, enabling, direct, and infrastructure-building activities to improve the health and well-being of children with special health care needs. (Maryland baseline: developmental)

### **Action Steps**

- ⇒ Assess community and regional needs including the identification of children with special health care needs and providers of health and health-related services for special needs children.
- ⇒ Promote partnerships and linkages with families, providers, and other stakeholders for special needs children programs and services.
- ⇒ Develop clinical and service guidelines to monitor, track, and evaluate the quality of health care services for special needs children and their families.
- ⇒ Provide appropriate data and information necessary for planning and policy development at the state and local levels.
- ⇒ Enhance and expand the health and health-related services network for special needs children.
- ⇒ Promote training and provide information and education to families, providers, and staff regarding management, care, and services for special needs children and their families.
- ⇒ Facilitate the transitioning of adolescents as they age out of public programs to other sources of care.
- ⇒ Maximize coordination with and among existing federal, state, and local programs offering services for special needs children.

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### Cross-Reference Table for Child and Adolescent Health

See Also

Calvert County .....	163
Caroline County .....	167
Dorchester County .....	194
Frederick County .....	202
Garrett County .....	207
Kent County .....	234
Queen Anne's County .....	256
Somerset County .....	265
Talbot County .....	269
Wicomico County .....	279



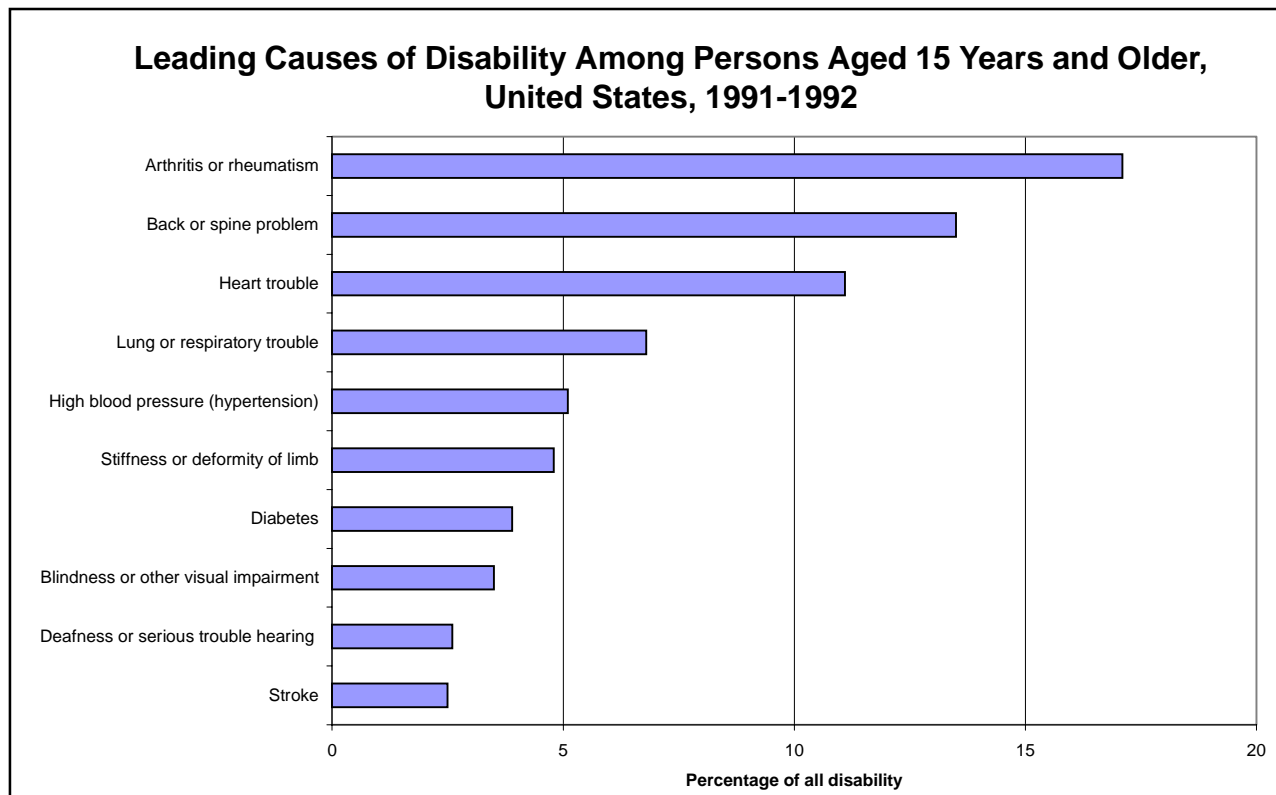
# CHRONIC DISEASE – ARTHRITIS

## Definition

“Arthritis,” as used in this document and in the *National Arthritis Action Plan*, includes a variety of rheumatic conditions and diseases of the joints. This use of the word “arthritis” encompasses more than 100 diseases and conditions that affect joints, the surrounding tissues, and other connective tissues. These diseases and conditions include osteoarthritis, rheumatoid arthritis, lupus, juvenile rheumatoid arthritis, gout, fibromyalgia, bursitis, rheumatic fever, and Lyme disease. The most common forms of arthritis are osteoarthritis, rheumatoid arthritis, and fibromyalgia.

## Problem

Arthritis currently affects more than 15% of the U.S. population (more than 43 million Americans), and more than 20% of the adult population, making it one of the most prevalent conditions in the United States. The large public health impact of arthritis is reflected in a variety of measures. First, it is the leading cause of disability. Second, health-related quality of life measures are consistently worse for people with arthritis. Third, arthritis has a large economic impact.



**Source:** Centers for Disease Control and Prevention. (1994). “Prevalence of disability and associated health conditions—United States, 1991-1992.” *Morbidity and Mortality Weekly Report*, 43 (40), 730-731,737-737. Atlanta, GA: Centers for Disease Control and Prevention.

Maryland, with a population of 5,130,072 (1998 Bureau of Census), has an estimated 769,500 individuals with arthritis (an estimate of 15% of the population). The estimated medical cost is \$270 million annually with estimated total costs (medical care and lost productivity) of \$1.2 billion due to arthritis. The burden of arthritis and related diseases is expected to continue to escalate to more than 847,000 people by the year of 2010 (Projected population: 5,651,525, Maryland Office of Planning).

## Determinants

There are certain risk factors known to be associated with arthritis. Three of these factors are *non-modifiable*: female sex, older age, and genetic predisposition.

- Women aged 15 years and older account for 60% of those who suffer from arthritis, the leading chronic condition among women. In Maryland, the number of women who are 15 years and older will be 2,291,693 by 2010.
- Age is also associated with increased risk of arthritis. Half of the elderly population is affected by arthritis, and risk increases with age. The number of elderly (65+ years old) will reach 683,835 in Maryland by 2010.
- Genetic predisposition to arthritis is a third non-modifiable risk factor. Certain genes are known to be associated with a higher risk of some types of arthritis.

In addition, a few clearly *modifiable* risk factors are also associated with increased risk of arthritis. These include:

- Obesity. In 1998 about 20% of the adult population was obese. The prevalence of obesity increased from 11.2% in 1991 to 19.8% in 1998, representing a 75% increase over the years. By year 2010, this number will reach 1,158,563 if the condition remains unchanged;
- Joint injuries;
- Joint infections;
- Certain occupations (e.g., shipyard work, framing, heavy industry, and occupations with repetitive knee-bending).

Arthritis affects 50% of persons 65 and older. However, most persons with arthritis are younger than age 65 and of working age. Arthritis is more common among women, for whom it is the leading chronic condition and cause of activity limitation. Whites and African-Americans have similar rates of disease, but African-Americans have greater rates of activity limitation. For African-Americans, arthritis is the third most common condition and the leading cause of activity limitation. For Hispanics and American Indians/Alaska Natives, arthritis is the second most common condition and the second leading cause of activity limitation. For Asian/Pacific Islanders, arthritis is the fourth most common condition and the second leading cause of activity limitation. Arthritis prevalence and disability are more common among persons with lower education and lower income. African-Americans have lower rates of total joint replacement, a surgical procedure highly successful in reducing the impact of arthritis in persons with severe pain or disability.



**Objective 1** - By 2001, establish a statewide surveillance system to track the prevalence of arthritis and its related disability and impact on quality of life.

**Objective 2** - By 2002, develop a state arthritis action plan to promote public awareness of the disease, early diagnosis and appropriate self-management, and development of continuing medical education programs for health care providers.

### **Action Steps**

- ⇒ Include the Centers for Disease Control and Prevention (CDC) Arthritis Module in the Maryland Behavioral Risk Factor Surveillance System (BRFSS).
  - ⇒ Build capacity and infrastructure within the Department of Health and Mental Hygiene to deal competently with the awareness of arthritis and related conditions and effectively carry out a future *Maryland State Plan for Arthritis*.
  - ⇒ Investigate existing primary, secondary, and tertiary intervention programs in the nation that have proven effective in lessening disparities among different populations and identify and promote useful strategies in those programs.
  - ⇒ Identify the number of current health care provider continuing education offerings related to arthritis, and augment as needed. Promote awareness and educational programs for health care providers.
  - ⇒ Develop and conduct a public-awareness campaign.
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### **Partners**

Arthritis Foundation of Maryland • Delmarva Foundation for Medical Care • Delmarva Orthopaedic Clinic • Governor's Council on Physical Fitness • Johns Hopkins University School of Medicine • Lupus Foundation of Maryland • Maryland Department on Aging • Maryland Health Care Commission • Maryland Local Health Departments • Maryland Medical Assistance Program, DHMH • Maryland Society for Rheumatic Diseases • Maryland State Advisory Council on Arthritis • Maryland State Osteoporosis Task Force • Med Chi—the Maryland State Medical Society • Office of Health Promotion, Education, and Tobacco Use Prevention, DHMH • University of Maryland, Baltimore County

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Cross-Reference Table for Chronic Diseases	
See Also	
Howard County .....	222

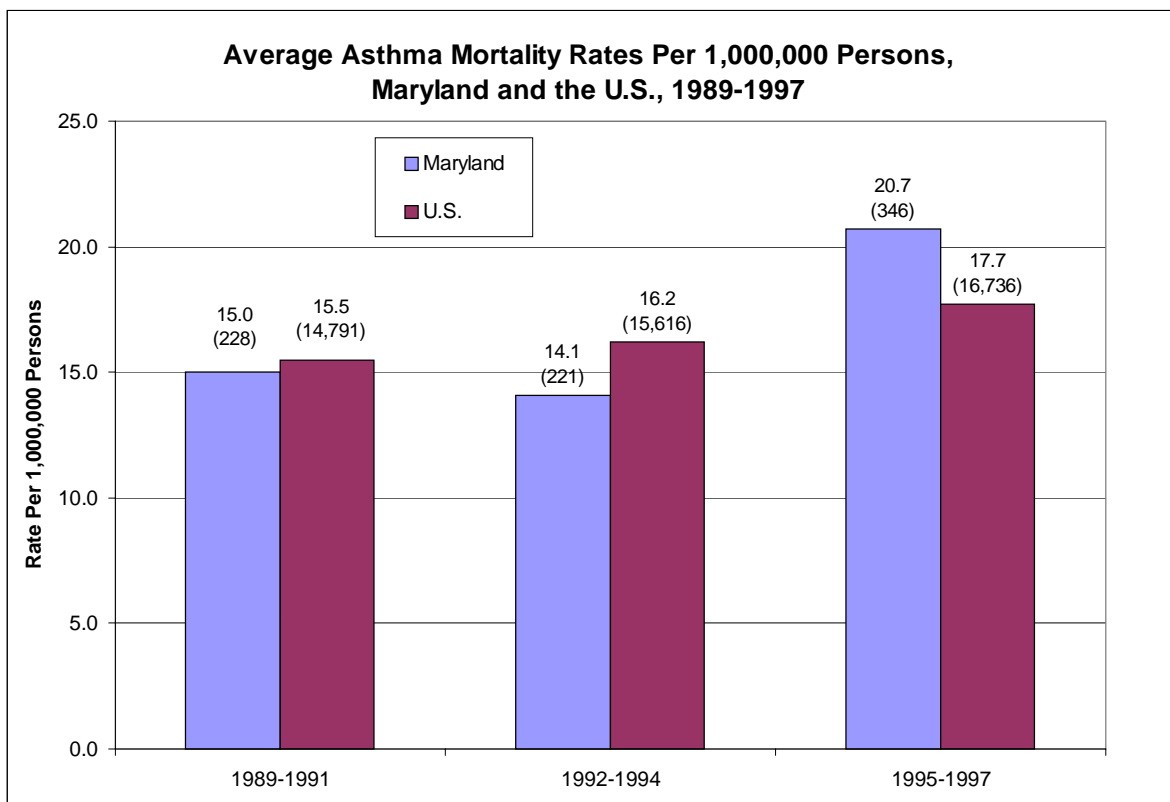


# ENVIRONMENTAL HEALTH

## Environmental Justice – Asthma Mortality

### Definition

“Environmental Justice” was defined in 1999 by the Maryland Advisory Council on Environmental Justice as equal protection from environmental hazards for all people regardless of race, income, culture, and social class. Environmental justice also means equal access to socio-economic resources so that all people can provide for their livelihood and health. Additionally, environmental justice means the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people, including racial, ethnic or socio-economic groups, should bear a disproportionate share of negative environmental consequences resulting from industrial, land-use planning and zoning, municipal, and commercial operations or the execution of federal, state, local or municipal programs and policies. Finally, for the purposes of this module, the definition will be extended to include children as a group of people deserving of equal protection, equal access, fair treatment, and meaningful involvement as described above.



Note: Age-Adjusted to the 1970 U.S. Population.

Source: Not provided.

## Problem

The level of data needed to describe a population or subgroup in terms of its potential for environmental justice problems is daunting. Information is needed on demographic, geographic, economic, health status, and environmental risk factors. The number of relevant variables in each category is considerable. The Environmental Protection Agency has recommended a list of 45 such variables to be used in assessing environmental justice concerns. Moreover, the databases from which this information may be abstracted are widely disparate in terms of quality and accessibility by researchers *if they exist at all*. In many cases the data needed to demonstrate an environmental justice problem are simply not collected or are done so on an irregular basis by a multitude of agencies. Many of these agencies have no historical basis for data sharing, and therefore, no skills or experience in linking seemingly disparate data for a new purposes. While advances in information technology have facilitated data analysis using multiple software platforms, the base variable definitions and parameters are often incompatible.

Geographic information systems (GIS) technology holds great promise as a revolutionary tool for presenting health and risk factor information, especially for evaluating environmental justice concerns. Simply put, it is usually much easier to understand environmental health data when displayed visually against a map than it is in tabular or graphical form. Although still in its early stages, GIS technology also offers the potential for conducting advanced statistical analysis to draw valid associations between environmental risk factors and health events based on the geographic coordinates of exposures and outcomes. The expertise needed to visually plot environmental health data is expanding quickly in environmental and public health agencies. However, the more advanced analytical skills are still relatively uncommon.

Asthma is an example of a public health concern that has many of the components of a potential environmental justice problem. It also has all of the data challenges described above for evaluating environmental justice concerns. Asthma is a health problem that is exacerbated by indoor and outdoor air pollution, and certain allergens. Research has shown the prevalence of asthma, the incidence of acute asthma attacks, and the number of asthma-related deaths to be higher in inner cities among children, older adults, and the poor. Data on asthma are collected by a multitude of local, state, federal, private, and volunteer agencies as well as academia. No single agency is repository for this information. Fewer agencies collect data on environmental risk factors which may contribute to asthma. However, the data are collected primarily on a regional basis and, therefore, they are not geared for analyses at the community level.

## Determinants

Research indicates a trend toward increasing asthma-related mortality in the U.S. and in Maryland. The list of suspected risk factors for asthma continues to expand. The effects of exposure to molds, dust mites, cockroaches, ozone, sulfur and nitrogen oxides, organic solvents, and other indoor and outdoor air pollutants are the subjects of ongoing worldwide research. The effects of various medical self-management practices and absence of adequate health care coverage are also being investigated. In fact, the definition of asthma for the purposes of coding illness and death in medical and vital records has been studied for decades.

While a great deal of research has been conducted on risk factors associated with asthma, all of this data is not necessary to begin evaluating asthma from an environmental justice perspective. The most basic information needed that is readily available to public health agencies is age, race, location of residence, socio-economic status, and mortality. Therefore, these variables will comprise the core determinants of an evaluation of asthma as an environmental justice problem.

Information is available to State public health investigators through the Department of Health and Mental Hygiene Vital Statistics Administration, the U.S. Census Bureau, and the National Center for Health Statistics. With the help of interested and motivated community groups, health officials can demarcate areas of concern with regard to asthma mortality, thereby eliminating the need to rely on less meaningful or possibly invalid boundaries such as census tracts.

**Objective 1** - To develop public health data that are useful for addressing environmental justice concerns. Asthma mortality and its relationship to geography, race, and socio-economic status will be used as a demonstration.

**Objective 2** - To demonstrate the use of geographic information systems technology as a tool for the production of public health data that are useful for addressing environmental justice concerns.

### **Action Steps**

*The Department of Health and Mental Hygiene will:*

- ⇒ Obtain geographic information systems software and develop proficiency in its application to environmental health analyses.
- ⇒ Work with the Baltimore Urban League Environmental Project to identify specific geographic areas of concern with regard to asthma mortality.
- ⇒ Obtain data on asthma mortality in the U.S. and Maryland for the years 1989 through 1997.
- ⇒ Work with the Baltimore Urban League Environmental Project to analyze data and provide visual and statistical demonstrations of asthma mortality in Maryland.
- ⇒ Work with the Baltimore Urban League Environmental Project and will seek an appropriate public forum to communicate its methods and findings.

**Partners**

Baltimore Urban League Environmental Project • Community and Public Health Administration, DHMH • Environmental Health Risk Assessment Program • Maryland Department of the Environment (MDE) • Maryland Department of Health and Mental Hygiene (DHMH) • Maryland Local Health Departments • Office of Environmental Health Coordination, DHMH • Technical and Regulatory Services Administration, MDE

**Related Reports**

Maryland Advisory Council on Environmental Justice. (1999, November). *Environmental justice in the state of Maryland.*

<b>Cross-Reference Table for Environmental Health</b>	
<i>See Also</i>	
Howard County .....	222

# FAMILY PLANNING



## Promoting Pregnancy Intendedness and Family Planning in Maryland

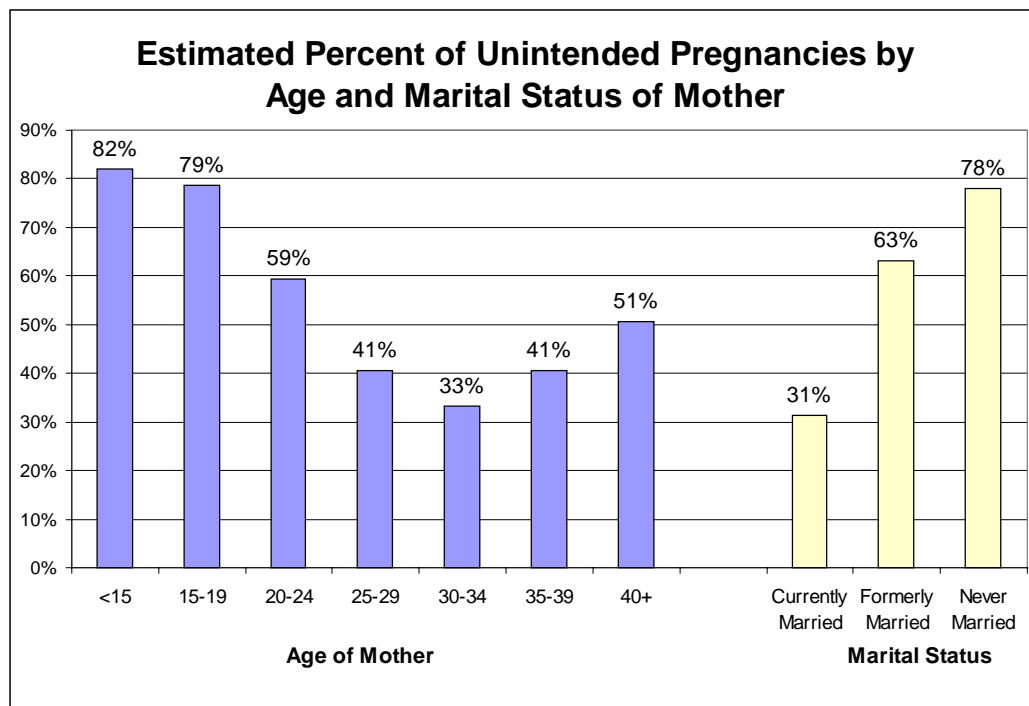
### Definition

Family Planning is the process of establishing the preferred number and spacing of one's children, selecting the means to achieve the goals, and effectively using that means. It is a collaborative decision between a woman, her partner and her health care provider about if and when to become pregnant, how many children to have, and how to plan a healthy pregnancy.

Intended Pregnancy is a pregnancy that a woman states was wanted at the time of conception.

### Problem

An estimated 49% of pregnancies in the U.S. are unintended. Pregnancies that are not intended run a higher risk of adverse consequences for women including pregnancy termination, reduced educational achievement and employment opportunity, increased welfare dependency, and increased potential for child abuse and neglect. Unintended pregnancy contributes to health care costs, regardless of the outcome. Medically, unintended pregnancies have an increased likelihood of infant and maternal illness, and abortion.



**Source:** Henshaw, Stanley K. (1998). "Unintended Pregnancy in the United States." *Family Planning Perspectives* 30 (1), 24-29, 46.

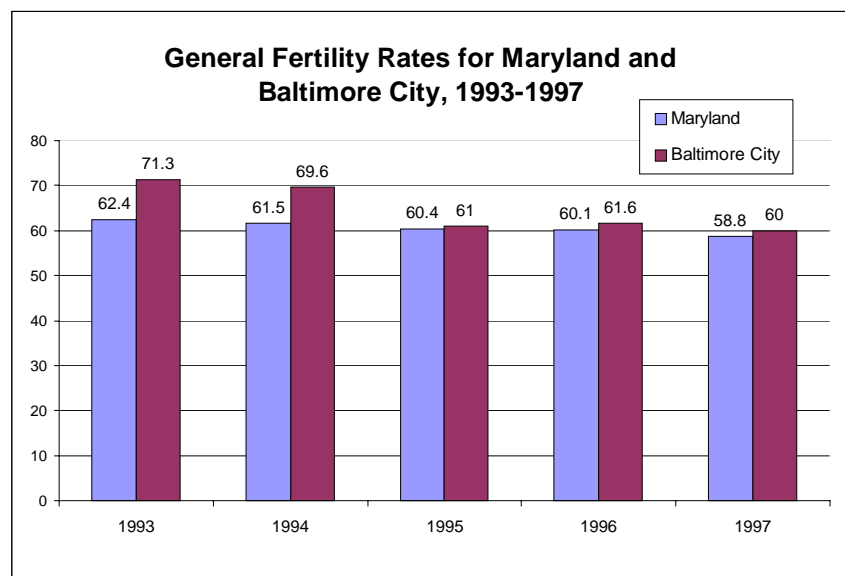
With an unwanted pregnancy, the mother is less likely to seek prenatal care in the first trimester and less likely to receive any prenatal care. She is less likely to breast-feed and more likely to expose the fetus to harmful substances such as tobacco and alcohol. The child of such a pregnancy is of greater risk of low birth weight, dying in its first year, being abused, and insufficient resources for healthy development.

For teenagers, the problems associated with unintended pregnancy are compounded by reduced educational attainment, fewer employment opportunities, increased likelihood of welfare dependency, and poorer health and developmental outcomes. Teenage mothers are less likely to get or stay married, less likely to complete high school or college, and more likely to require public assistance and live in poverty than their nonpregnant counterparts. Infants born to teenage mothers, especially mothers under age 15, are more likely to suffer from low birth weight, neonatal mortality and sudden infant death syndrome. They also may be at greater risk of child abuse, neglect, and behavioral and educational problems at later stages.

In Maryland, as in the Nation, African-Americans are at greater risk of unintended pregnancy and poor pregnancy outcome. These racial disparities must be addressed in public health programs.

## Determinants

In order to increase the proportion of pregnancies which are intended, a number of key determinants need to be in place. The first and probably most important is that the nation, and Maryland, adopt a social norm in which all pregnancies are intended. This was the foremost recommendation of the Institute of Medicine report, *Best Intentions: Unintended Pregnancy and the Well Being of Children and Families*, 1995.



Source: Maryland Vital Statistics, Annual Reports, 1993-1997

Note: General Fertility Rates are the total births per 1000 women aged 15-44.

In Maryland, there is evidence that the number of unintended pregnancies has declined over the last decade. From 1993 to 1997 there has been a decrease in the birth rates throughout the State and in Baltimore City. This decline in birth rates, which is consistent with the decline in national rates, has been attributed to several factors. These are the increased use of DepoProvera and other effective contraceptive methods; increased abstinence; an increase in the number of programs that serve men; and, the increase in public condom distribution.

One of the most important determinants of pregnancy and birth rates is contraceptive use. Since 1982, the percentage of women in the U.S. using contraceptive methods has risen from 56% to 64%, and yet 5.2% of all women, age 15 to 44 years, who had intercourse in the last three months



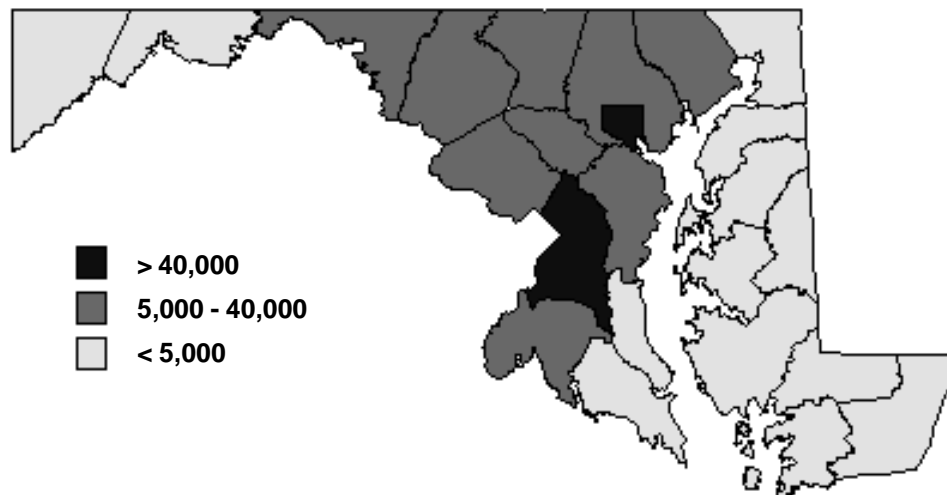
did not use contraceptives. The effectiveness of the contraceptive method being used is an important consideration. There are no perfect methods of contraception; nor is any one method likely to be consistently and continuously suitable for each woman, man or couple.

In Maryland, as in the United States, the choice of contraceptive methods needs to be expanded. This expansion includes the development and increased use of newer and more effective methods, and also the availability of methods not yet available in this country. Surveys indicate that knowledge and use of postcoital contraception remains low among patients and clinicians alike.

Gaps in service and coverage still exist and private health insurance coverage of family planning and contraceptive services is modest. Even for those who are covered by private insurance, family planning and contraceptive services are frequently not included or may require deductibles or copayments.

The map below provides a measure of need by showing the number of women in need of publicly supported family planning services:

**Number of Women in Need of Publicly-Supported  
Family Planning Services, Maryland, 1995**



**Source:** Women in Need, 1995, The Alan Guttmacher Institute

Note: Total 257,430

Although unintended pregnancies occur among women of all socio-economic levels, marital status and age groups, unmarried women, poor women and African-American women as well as women at either end of the reproductive age span are especially likely to become pregnant unintentionally. These women are the least likely to have the resources necessary to access family planning services and the most likely to be negatively affected by an unintentional pregnancy. Half of all women who are at risk of unintended pregnancy and need publicly subsidized family planning services are not getting them, despite the efforts of various private and public organizations, including Federal Programs.

A 1995 survey of the Nation's family planning providers estimated that only three-fourths provided contraceptive services to hard to serve populations such as men, substance abusers, disabled persons, incarcerated men and women, homeless persons, and non-English speaking minorities. Furthermore, we do not know if those agencies that did provide services targeted services to special populations or simply provided care to those who happened to seek it. The need for family planning services among these groups is undeniably great.

Language and cultural differences are significant barriers to serving non-English speaking minority populations. Understanding and reaching such populations can be difficult.

**Objective 1** - Increase the proportion of intended pregnancies in Maryland from 51% in 1998 (national estimate) to 70% in 2010.

**Objective 2** - Increase the proportion of Maryland females at risk of unintended pregnancy (and their partners) who use contraception from 93% in 1995 (national estimate) to 100% in 2010.

### **Action Steps**

- ⇒ Promote the use of the most effective contraceptive methods.
- ⇒ Expand the choice of contraceptive methods available in Maryland.
- ⇒ Promote the use of abstinence and other sexual alternatives.
- ⇒ Increase the number of programs that serve men and teach men the value of sexual responsibility.
- ⇒ Distribute condoms through easy and anonymous access at a large number of public sites.
- ⇒ Develop an advisory coalition of organizations and citizens focused on pregnancy intendedness. Bring together other health programs with similar health concerns (HIV, Sexually Transmitted Infections, Prenatal Care).
- ⇒ Identify the data that are needed to work toward Year 2010 goals and objectives and develop a surveillance system for pregnancy intendedness in Maryland.
- ⇒ Develop and implement strategies to strengthen the value of "intended" pregnancy in Maryland.

## Partners

Baltimore Community Foundation • Center for Maternal and Child Health, DHMH • Johns Hopkins University, School of Hygiene and Public Health • Maryland Community Health Centers • Maryland Local Health Departments • Maryland Primary Care Services, DHMH • Pfizer, Inc. • Planned Parenthood of Maryland, Inc.

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## Cross-Reference Table for Family Planning

See Also

Calvert County ..... 163

# PREVENTING HEART DISEASE AND STROKE



## Definition

Coronary heart disease and stroke (cerebrovascular disease) are part of the broad category of cardiovascular diseases or diseases of the heart and circulatory system.

## Problem

Heart disease and stroke are leading causes of death and disability in Maryland for both men and women. Coronary heart disease, which may result in heart attack, accounts for more than half of all cardiovascular disease. Stroke is the number three cause of death in Maryland. Both heart disease and stroke are significant contributors to increasing health care costs. In the United States the cost associated with medical care, lost productivity, and lost future wages due to cardiovascular disease is projected to be \$286 billion for 1999.

## Determinants

Heart disease and stroke deaths rise significantly after age 65. The death rate is generally higher in men than in women and in African-Americans than in whites. Age, sex, race, and family history are non-modifiable risk factors for cardiovascular disease.

High blood cholesterol, high blood pressure, cigarette smoking, physical inactivity, and obesity are all risk factors for both heart disease and stroke. An additional

risk factor for heart disease is diabetes. Lifestyle modifications to change these risk factors are a major strategy for preventing heart disease and stroke in the population. Maintaining a healthy weight, increasing physical activity, and making dietary modifications to decrease fat and sodium while increasing fruits, vegetables, and low-fat dairy foods can lower blood pressure. Losing weight, if overweight, increasing physical activity, and consuming a diet low in total fat, saturated fat, and dietary cholesterol can lower blood cholesterol.

### Percent of Adult Population Reporting Factors Related to Heart Disease and Stroke In Maryland, 1990-1998

Risk Factor	1990 Percent	1997/98 Percent
High blood pressure	20.6	23.8
High blood cholesterol	25.9	28.6
Obesity	12.0	20.5
Overweight	31.1	35.0
Fruit/Vegetable intake	N/A	69.9
Physically inactive	30.0	20.3
Irregular activity	30.8	30.1
Regular activity	30.1	33.2
Regular, sustained activity	7.8	16.4

**Source:** Maryland Behavioral Risk Factor Surveillance System, 1990-1998

Preventing heart disease and stroke in Maryland requires behavioral changes, beginning in childhood, to achieve healthy diet, maintain healthy weight, and healthy levels of physical activity.

## Disparities

Data from the *Maryland Vital Statistics Annual Report 1997* confirm that heart disease deaths in Maryland adults are highest for men; higher for African-American men than for white men; and higher for African-American women than for white women. In *Healthy People 2010*, the Department of Health and Human Services reports heart disease mortality rates have declined, but the decline is leveling off as the population ages.

Data from the *Maryland Vital Statistics Annual Report 1997* show stroke death rates to be highest in Maryland for African-Americans and are higher for African-American males than for African-American females. White males have a lower stroke death rate than African-American women but a higher rate than white females. In *Healthy People 2010*, the Department of Health and Human Services reports the decline in stroke deaths has occurred primarily because of improvements in detecting and treating high blood pressure.

Estimates of prevalence of risk factors for the population of Maryland in this heart disease and stroke report are all based on data from the Behavioral Risk Factor Surveillance System (BRFSS) for the years 1990 through 1998. Data from random sample surveys are weighted to reflect age, sex, and race of the population of Maryland based on census reports.

The latest BRFSS data on high blood pressure and high blood cholesterol levels show a slight increase in awareness and a disparity between African-Americans and whites. In 1997, 24% of the population of Maryland reported being told by a health professional that their blood pressure was high. A higher percentage of women (25%) were aware of having high blood pressure than were men (23%). African-Americans reported having high blood pressure more often than whites did, 30% vs. 23% respectively. Based on data from the National Center for Health Statistics only 11% to 25% of people with high blood pressure meet the recommended guideline for blood pressure control of 140/90 mm Hg.

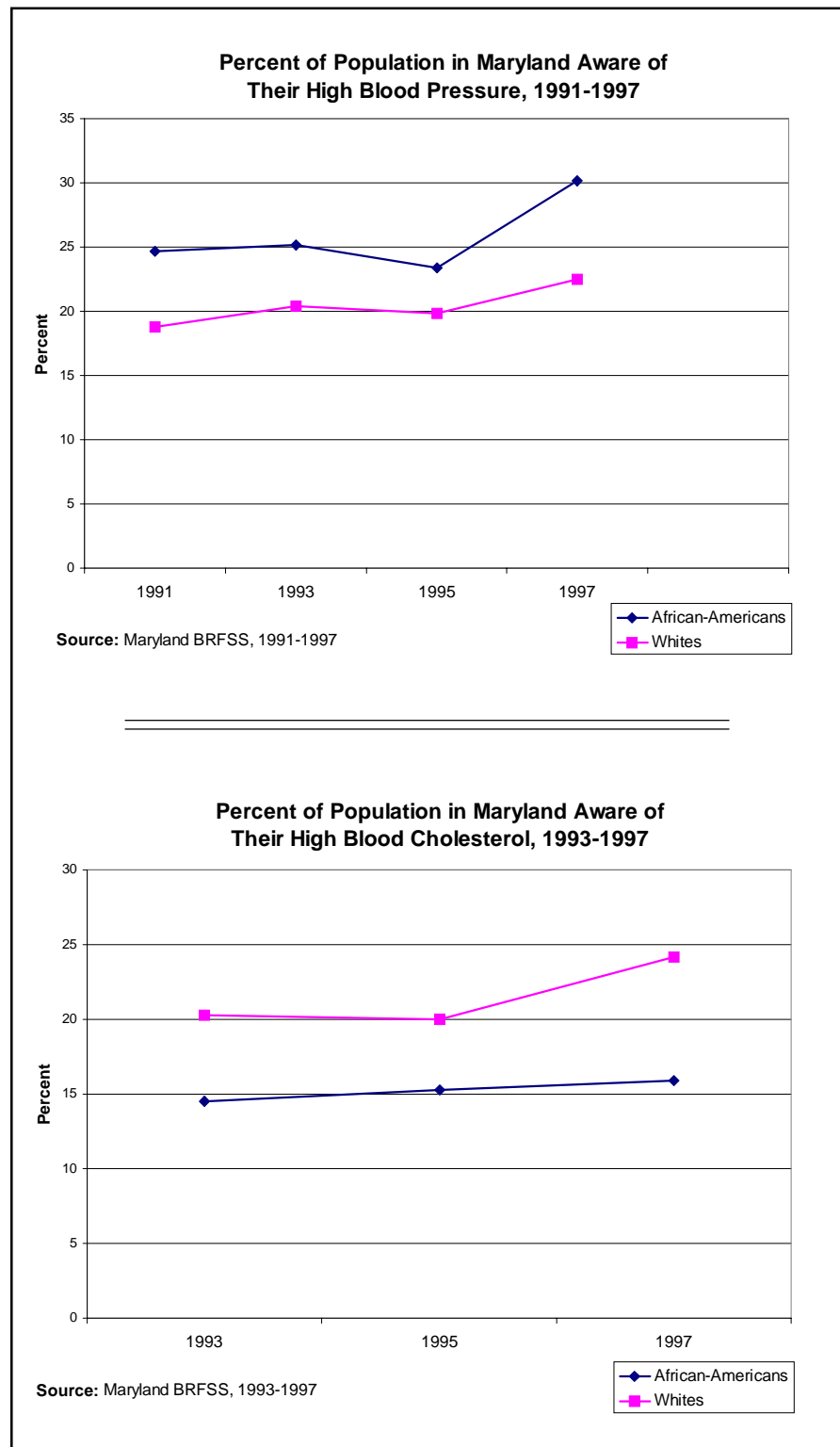
Also in 1997, 75% of the population of Maryland reported having their cholesterol checked within the previous five years and 29% had been told by a health professional that their blood cholesterol level was high. The awareness of high blood cholesterol is nearly identical for men and women. Thirty-one percent of white adults report having been told they have high blood cholesterol compared to only 22% of African-American adults.

Trends for obesity and overweight clearly show that Maryland residents are growing heavier. Obesity is defined as a Body Mass Index (BMI) of 30 or more; overweight is defined as a BMI of 25.0 to 29.9. [Body Mass Index = Weight (kg) /height (meters).] Between 1990 and 1998 the percentage of the population identified as being overweight increased from 31% to 35%. The proportion identified as obese jumped from 12% to almost 21%.

*Obesity* prevalence is about the same for males and females. A much larger percentage of African-Americans are obese (31%) compared to white adults (17%). More men (44%) than women (26%) are *overweight*. More African-Americans than whites are overweight, although the gap is small (38% vs. 34%).

The percentage of the population consuming five or more servings of fruits and vegetables per day, rose, between 1992 and 1998, from 21% to 30%. African-American and white women report similar intakes. Men consistently lagged behind women in reported fruit and vegetable consumption. Among African-American men, 23% report consuming five or more servings of fruits and vegetables a day, compared to 26% of white men.

The population of Maryland is becoming more physically active, but the percentage reporting regular physical activity is relatively small. Between 1990 and 1998, the prevalence of regular physical activity increased from 30% to 33% while the prevalence of regular, vigorous physical activity increased from 8% to 16%. *Regular activity* is defined as activity three or more times per week for 20 or more minutes per session at less than 50% cardiorespiratory capacity; *regular vigorous activity* is activity three or more times per week, 20 or more minutes per session, at more than 50% of cardiorespiratory capacity.



In 1998 more women than men reported inactivity (21% vs. 19%); regular activity (34% vs. 33%); and regular, vigorous activity (17% vs. 15%). More men (33%) than women (28%) reported irregular activity. *Physical inactivity* is defined as no leisure-time physical activity; *irregular activity* as some activity but less than three times per week or less than 20 minutes per session.

The prevalence of inactivity and irregular activity reported in 1998 is higher among African-Americans than among whites, being 26% vs. 18% and 32% vs. 30% respectively. African-Americans also report less regular activity than whites (30% vs. 36%) and less regular, vigorous activity than whites (13% vs. 17%).

Data on the prevalence of risk factors is not available for Maryland youth. Autopsy studies (Heald, 1990) reported in *Medical Clinics of North America* have shown that atherosclerosis already is present in U.S. adolescents and children. They consume fruits and vegetables at the same low rate as adults. According to an American Diabetes Association Consensus Report, youth rates of obesity and type 2 diabetes are also rising in the U.S.

**Objective 1 -** By 2010, reduce cardiovascular disease deaths to no more than 100 per 100,000 population. (Baseline: 127.5 in 1997; Age-adjusted to 1940)

**Objective 2 -** By 2010, reduce stroke deaths to no more than 20 per 100,000 population. (Baseline: 25.2 in 1997; Age-adjusted to 1940)

### Action Steps

- ⇒ Provide interventions that increase the proportion of adults, youth, and children who engage regularly, preferably daily, in moderate physical activity for at least 30 minutes per day.
- ⇒ Provide interventions that increase the proportion of adults, youth, and children who consume a healthy diet following *Dietary Guidelines for Americans* (2000).
- ⇒ Provide interventions that increase the proportion of adults who know their blood pressure and cholesterol and are attempting to reduce and control these levels if they are elevated.

# Partners

American Heart Association (Maryland Affiliate) • Baltimore Alliance for the Prevention and Control of Hypertension and Diabetes • Delmarva Foundation for Medical Care • Maryland Health Care Commission • Johns Hopkins University • Maryland Association of County Health Officers • Maryland Chapter of the American Cancer Society • Maryland Department of Health and Mental Hygiene (DHMH) • Maryland Hospital Association • Maryland Nurses Association • Maryland Local Health Departments • Maryland Office on Aging • Maryland State Advisory Council on High Blood Pressure and Related Risk Factors • Maryland State Advisory Council on Physical Fitness • Maryland State Department of Education • Med Chi—the Maryland State Medical Society • Morgan State University • Network to Improve Community Health • Office of Chronic Disease Prevention • University of Maryland, Baltimore County • Veterans Administration Medical Center • Women’s Health Promotion Council

# Related Reports

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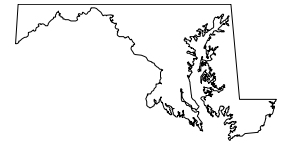
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Cross-Reference Table for Heart Disease and Stroke	
See Also	
Cecil County .....	180



# HIV



## Focus Area 1 - Reducing HIV Infection in Maryland

### Definition

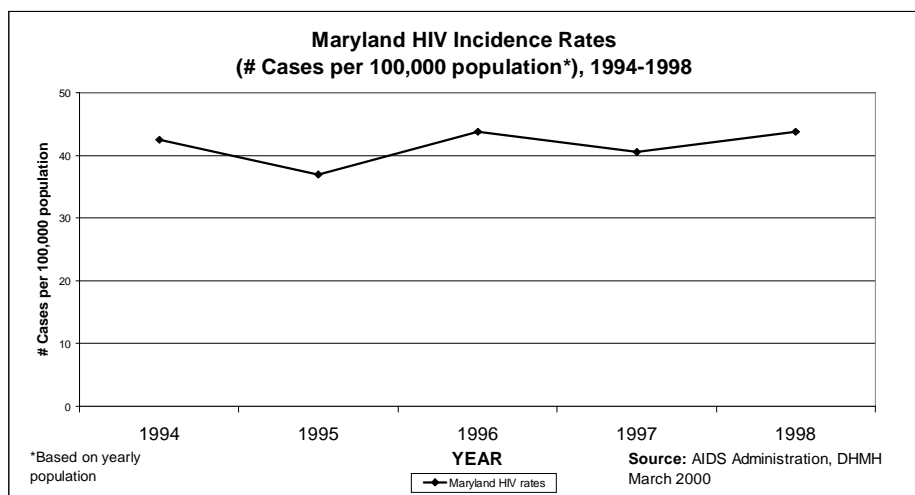
Human Immunodeficiency Virus (HIV) is the pathogenic organism responsible for Acquired Immunodeficiency Syndrome (AIDS). HIV cases are first time reports of HIV infection in pre-AIDS individuals with a positive HIV test and Maryland residence at the time of diagnosis. HIV incidence rate is the number of new HIV cases diagnosed during a year divided by the population and is expressed per 100,000 population.

### Problem

Maryland had the fourth highest AIDS incidence rate in the United States from July 1998 to June 1999, with 32 cases per 100,000 population. Since reporting began in 1994, HIV incidence in Maryland has been increasing; reaching 44 per 100,000 population in 1998. A cumulative total of 12,111 non-AIDS HIV infections have been reported in Maryland as of September 1999. Approximately 2,000 new HIV cases are reported each year and this number is increasing at a rate of 3% annually. Despite estimates from the Centers for Disease Control and Prevention (CDC) of declining HIV infection nationally, there is an increasing population of people becoming infected with HIV in Maryland.

### Major Determinants

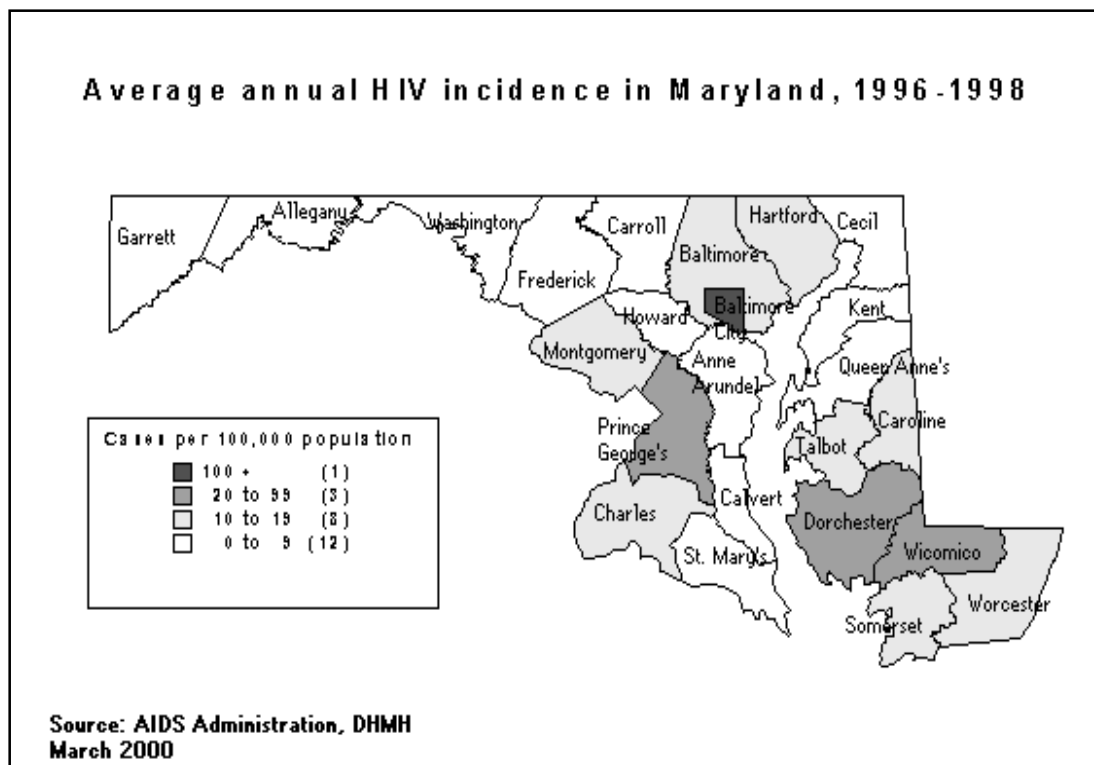
HIV is present in bodily fluids and is transmitted primarily through sexual contact and sharing needles during drug use. Involvement in high risk sexual and drug use behaviors are major determinants of HIV. The main exposure categories are classified as: men who have sex with men (MSM); injecting drug use (IDU); men who have sex with men and injecting drug use (MSM/IDU); hemophilia/coagulation disorder; heterosexual contact with a partner who has or is at risk of HIV or with a partner of indeterminate risk; and receipt of blood transfusion, blood components, or tissue. Nearly all HIV infections in children are perinatally acquired. The provision of antiretroviral therapies during the perinatal period resulted in substantial decreases in mother-to-child transmission of HIV.



Exposure information is currently available only from those tested in publicly funded HIV Counseling and Testing Services (CTS) sites (approximately 25% of HIV cases). Data from this sub-population suggests that most 1998 HIV incident cases are due to heterosexual contact (49%) followed by IDU (33%), and MSM (7%). The proportion of persons in the general population engaging in these sexual and drug use risk behaviors is unknown. Despite incomplete risk behavior information on both the cases and the population, examinations of affected populations reveal geographic, racial, and gender disparities that can identify high-risk sub-populations.

Baltimore City, suburban Baltimore, and suburban Washington account for over 75% of Maryland's cumulative HIV cases. A map of Maryland shows the average annual rates of HIV incidence between 1996 and 1998. Of Maryland's 24 jurisdictions, Baltimore City has a substantially higher average HIV incidence rate (175 per 100,000) and higher numbers of HIV cases (6,407 cumulative) than the rest of the counties in the State. Prince George's, Wicomico, and Dorchester counties also have high HIV incidence rates (32, 25, and 25 per 100,000, respectively). Though there are not many cases in Wicomico and Dorchester counties (14 and 9 in 1998, respectively), the case rate is relatively high.

Of the over 33,000 individuals tested confidentially through the CTS program in 1998, 64% were African-American and had a 2.6% HIV positivity rate, substantially higher than the 0.7% for whites. HIV disproportionately affects males and African-Americans in Maryland. The 1998 HIV incidence rates are 59 per 100,000 for males and 36 per 100,000 for females. The African-American population has the highest rates among both genders, followed by Hispanic and white populations. HIV incidence in African-American males is approximately twice the rate than in



African-American females. Though the reported infection was concentrated mainly in males during the first several years of the epidemic, over time, HIV incidence rates have been increasing among African-American females. The net result is a narrowing gap between males and females infected with HIV.

**Objective 1** - Eliminate the increase in HIV incidence (particularly among African-American and other disproportionately affected groups, with special focus on high incidence areas) and maintain a rate of 44 new positives per 100,000 population.

**Objective 2** - Increase the number of African-Americans receiving HIV education, counseling, and testing services by 25% from 42,000 tests in 1998 to 52,500.

**Objective 3** - Reduce perinatal transmission of HIV from 25 cases per year in 1998 to less than 10 cases per year.

### **Action Steps**

- ⇒ Expand the availability of and access to HIV counseling and testing services in disproportionately affected populations.
- ⇒ Increase collaboration among agencies to enhance access to and use of needed prevention services by disproportionately affected populations.
- ⇒ Reduce the drug and alcohol use associated with HIV risk behaviors among adults and youth in Maryland by increasing perceptions of risk, reducing risky drug and alcohol related activities, increasing substance abuse treatment opportunities, and improving adherence for those who choose to go into treatment.
- ⇒ Among the current providers, increase their skills and support to deliver quality HIV risk reduction interventions.
- ⇒ Increase the supply of free and sterile needles among injection drug users.
- ⇒ Increase the number and intensity of well-evaluated prevention interventions and reduce stigma of HIV testing in the African-American and other disproportionately affected populations.
- ⇒ Increase the accessibility of condoms among sexually active youth and adults engaging in risky behaviors and increase the use of condoms by persons engaging in risky behaviors.
- ⇒ Provide prenatal care according to established standards for all HIV positive pregnant women.

## Partners

AIDS Administration, DHMH • HIV Prevention Community Planning Group • Johns Hopkins University • Maryland Association of County Health Officers • Maryland Local Health Departments • Maryland Mental Hygiene Administration, DHMH • Maryland State Department of Education • Morgan State University • University of Maryland, Baltimore County • Numerous other state universities and over 50 community-based organizations

## Related Reports

Maryland Community Planning Group. (2000). *HIV Prevention Plan 2001-2003*.

Maryland Department of Health and Mental Hygiene, AIDS Administration. (1999). *HIV prevention program annual report*.

Maryland Department of Health and Mental Hygiene, AIDS Administration. (1999). *The 1999 Maryland annual HIV/AIDS report*.

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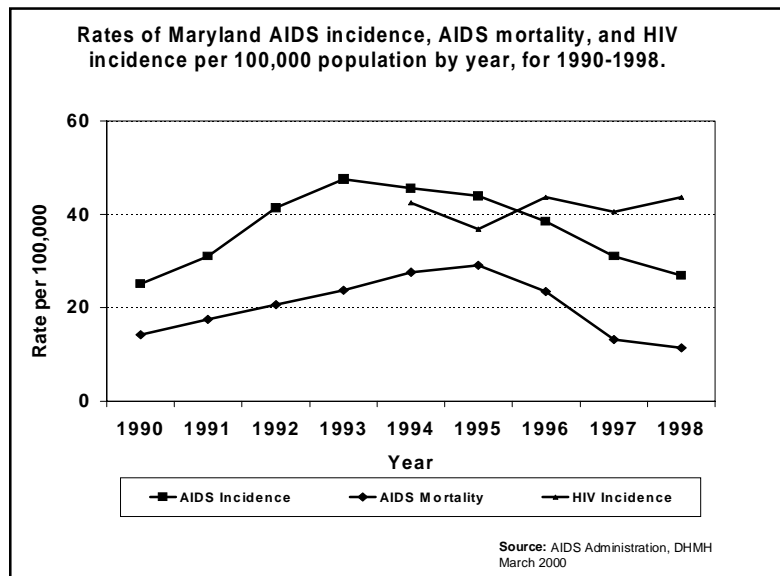
## Focus Area 2 - Extending Life for People with HIV

### Definition

Acquired Immunodeficiency Syndrome (AIDS) is the advanced clinical stage of Human Immunodeficiency Virus (HIV) infection. The HIV incidence rate is the number of new HIV cases diagnosed during a year divided by the population and is expressed per 100,000 population. HIV incidence is not true incidence, because several years may elapse between infection and HIV testing (detection). The AIDS incidence rate is the number of new AIDS cases diagnosed during a year divided by the population and is expressed per 100,000 population. The AIDS mortality rate is the number of deaths among AIDS cases during a year divided by the population and is expressed per 100,000 population. The one-year survival is an estimate of the proportion of AIDS cases that are alive one year after diagnosis and is expressed as a percent. The median survival is an estimate of the time after AIDS diagnosis at which one half of cases are alive and is expressed in months.

### Problem

The first case of AIDS in Maryland was reported in October 1981. By November 1999, a total of 20,000 cases had been reported. In the early years of the epidemic there was no way to detect HIV infection, and rapid death after AIDS diagnosis was universal. During the first five years, only 38% of people survived one year after their AIDS diagnosis. HIV testing became available in 1985 and during the late 1980's natural history cohort studies estimated the time from HIV infection to AIDS diagnosis to be



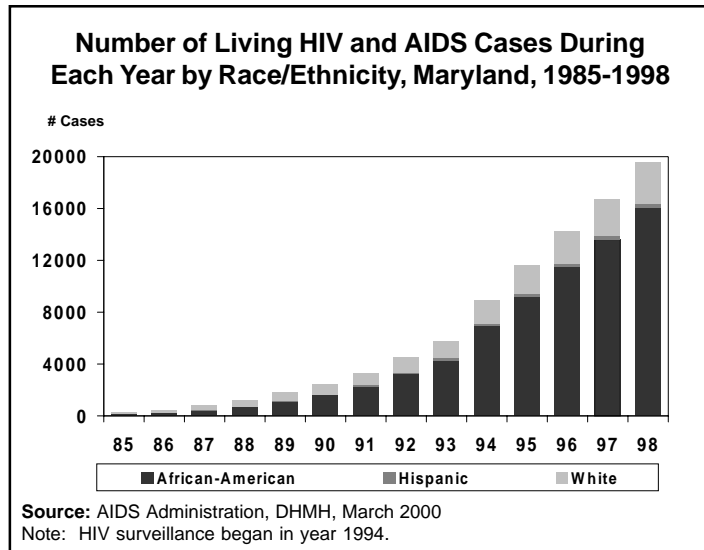
eight years and the time from AIDS diagnosis to death to be two years. New treatment regimens have resulted in improvements in, even doubling of, these survival times. However, since the average age at AIDS diagnosis in 1998 was 40 for males and 37 for females, and the life expectancy for males that age is 37 more years and for females 44 more years, HIV has dramatically shortened people's life expectancies.

### Major Determinants

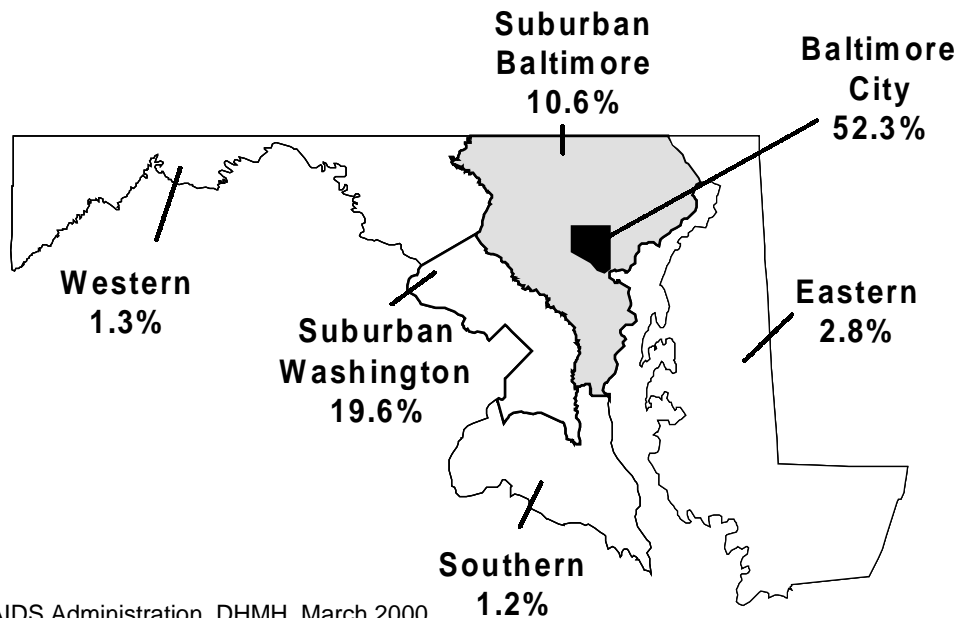
The major determinants for extending life for people with HIV are early detection and treatment of infection and access to appropriate medical care, including antiretroviral therapies. There are three points to measure in the spectrum of HIV disease: the point of initial detection of HIV, the point of severe immuno-suppression (AIDS), and death. The goal is to expand the time between these three points. HIV surveillance began too recently (June 1994) to provide reliable

population estimates of time from detection of HIV infection to AIDS. In addition, due to delays in test seeking, the time from actual HIV infection to detection of HIV is not known, although this may improve with new HIV testing methodologies. The number of people developing AIDS is a well-characterized population statistic and can be used to measure morbidity. Deaths are also well-reported and the time between AIDS diagnosis and death can be used to measure changes in survival time.

During the first half of the 1990s, AIDS incidence continued its historic epidemic growth, from 25/100,000 in 1990 to 44 per 100,000 in 1995. The expansion of the AIDS case definition in 1993 led to an artificial increase in the AIDS incidence rate during 1992-1994. The introduction of a new class of antiretroviral drugs (protease inhibitors) in 1996 resulted in an immediate decline in the AIDS incidence rate (a 12% decline from 1995 to 1996, and a 39% total decline from 1995 to 1998) to 27 per 100,000 population in 1998.



### Percentage of Living Maryland HIV and AIDS Cases by Region, as of December 31, 1998



Source: AIDS Administration, DHMH, March 2000

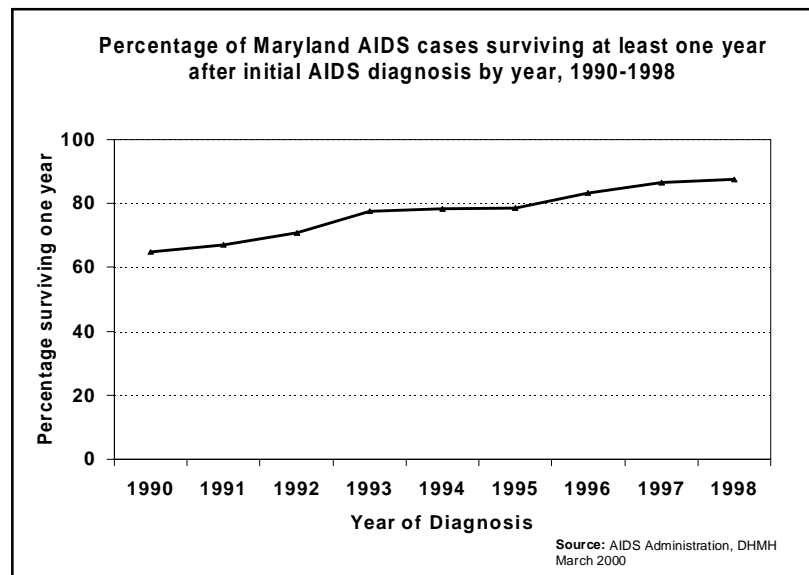
Note: The remaining percentage of cases (12.2%) were diagnosed among inmates at state correctional facilities.

This was mirrored by a decline in the AIDS mortality rate (a 19% decline from 1995 to 1996, and a 60% total decline from 1995 to 1998) to 12 per 100,000 population in 1998. The HIV incidence rate has remained unaffected by the new drugs, increasing slightly from 42 per 100,000 in 1994 to 44 per 100,000 in 1998. This suggests that new cases of HIV continue to occur, but that fewer of the previously infected cases are developing AIDS and dying. The result is an increasing number of people living with HIV and AIDS, a greater proportion of which are pre-AIDS.

The number of living African-American HIV and AIDS cases has increased the most of any racial/ethnic group from around 1,600 in 1990 to over 16,000 in 1998, a ten-fold increase. In contrast, living white HIV and AIDS cases had a four-fold increase in the same time period from almost 800 to just over 3,200 cases. One of the reasons for the large overall increase in living HIV and AIDS cases is that HIV surveillance began in 1994.

The population living with HIV (including living AIDS cases) is concentrated in certain demographic and geographic sub-populations. Of the 19,806 people known to be living with HIV or AIDS during 1998, 47% had AIDS. The HIV and AIDS cases were predominantly African-American (81%) and male (67%). The single largest group was African-American males, 53% of the total, followed by African-American females (28%) and white males (12%). The cases were concentrated in Baltimore City (52%) and the suburban counties surrounding Baltimore (11%) and Washington, D.C. (20%). An additional 12% of cases were diagnosed while incarcerated in State correctional facilities.

The life expectancy after AIDS diagnosis improved throughout the 1990s. The one year survival increased from 65% for cases diagnosed in 1990 to 88% in 1998. During the same time, the median survival time increased from 21 months for cases diagnosed in 1990 to 45 months for cases diagnosed in 1995, the last year for which median survival can be measured. The increase in survival time after AIDS diagnosis preceded the introduction of protease inhibitors. This is attributed to earlier detection of HIV infection and improved treatments, particularly prophylaxis to prevent opportunistic infections.



**Objective 1** - Decrease the rate of new AIDS cases by 25%, from 27 per 100,000 population to 20 per 100,000 population.

**Objective 2** - Decrease the AIDS death rate by 25%, from 12 per 100,000 population to 9 per 100,000 population.

**Objective 3** - Increase time from AIDS diagnosis to death by 25%, from 45 months to 56 months.

**Objective 4** - Increase the percent of people with AIDS who live for at least one year, from 88% to 91%.

### **Action Steps**

Particularly among African-Americans and other disproportionately affected populations:

- ⇒ Increase the proportion of people living with HIV who know their serostatus by increasing testing in high risk populations.
- ⇒ Increase the proportion of persons living with HIV who receive care, which will both prolong life and improve quality of life. Services include: ambulatory outpatient/medical care, case management, self-care education, dental care, medications, mental health treatment/counseling, nutrition, substance abuse treatment counseling, housing, vocational rehabilitation, and other support services.
- ⇒ Increase access and adherence to current and emerging therapies for persons living with HIV.
- ⇒ Increase quality evaluations of services to people living with HIV/AIDS.
- ⇒ Increase the number of culturally competent providers who are skilled at diagnosing HIV/AIDS and providing quality treatment according to established standards for persons living with HIV/AIDS.
- ⇒ Increase collaboration among agencies to reduce barriers and enhance access to and use of needed services among persons living with HIV.



## Partners

AIDS Administration, DHMH • Johns Hopkins Medical Institution • Maryland Medical Assistance Program, DHMH • Maryland Association of County Health Officers • MedChi—the Maryland State Medical Society • Maryland HIV Care Consortia • Maryland Local Health Departments • University of Maryland Medical Systems

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### Cross-Reference Table for HIV

#### See Also

Caroline County .....	167
Kent County .....	234

# INFECTIOUS DISEASE



## Focus Area 1 - Vaccine-Preventable Diseases

### Definition

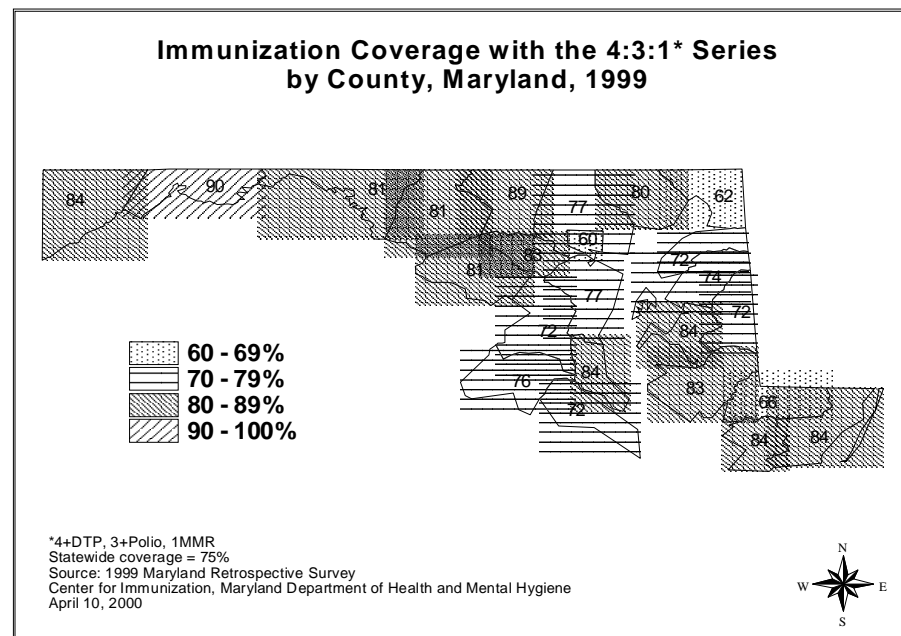
Vaccine-preventable diseases are those that are prevented by the administration of vaccines to susceptible populations.

### Problem

Low immunization rates and diseases that can be prevented by vaccines continue to be concerns in Maryland, especially among preschoolers and the elderly. Although significant progress has been made since 1996, immunization rates are at less than acceptable levels. Vaccine-preventable diseases, such as hepatitis B, *H. influenzae* type B, and pertussis, continue to occur in Maryland. In 1999, the total number of cases of hepatitis B was 148; pertussis was 124; and *H. Influenzae* type B (for children under 7 years) was 1. Many of these cases would have been prevented if the individuals involved had been appropriately vaccinated.

### Determinants

In 1999, the immunization coverage rates for the 4:3:1 series [4 doses Diphtheria/Tetanus/Pertussis (DTP), 3 doses Polio, 1 dose Measels/Mumps/Rubella (MMR)] for children at 19 to 35 months of age was 80% in Maryland. This is identical to the national average. A similar situation occurs for the 4:3:1:3 series (4 doses DTP, 3 doses Polio, 1 dose MMR, 3 doses Hepatitis B) where both Maryland and the United States have a coverage rate of 79% for children 19 to 35 months of age. Maryland's coverage rates need to increase in order for more vaccine-preventable diseases to be prevented. Barriers and obstacles to increasing coverage rates and preventing vaccine-preventable diseases are public awareness, provider education, cost, and service availability.



## Sub-Populations

The target populations for improving immunization coverage levels are the following: children, ages birth to two years (estimated at 172,031 for 1998); and adults, ages 50 years and older (estimated at 1,349,994 for 1998). Current estimates for 1999 by the Centers for Disease Control and Prevention's National Immunization Survey place Maryland at 80% for the 4:3:1 vaccination series. Our goal of reaching 90% coverage for the 4:3:1 vaccination series is identical to the national goal.

### Immunization Coverage Rates Among Children in Nursery School and Kindergarten During the 1999-2000 School Year

	Nursery School	Kindergarten
Diphtheria-Tetanus-Pertussis	98%	99%
Measles-Mumps-Rubella	99%	98%
<i>Haemophilus influenzae</i> type b	99%	NA
Polio	98%	99%

**Source:** 1999-2000 New Enterers Survey, Maryland Center for Immunization, DHMH

Note: Includes both public and private schools.

**Objective 1** - Achieve immunization coverage (4 DTP, 3 Polio, 1 MMR) of at least 90% among children 19 to 35 months of age.

### Action Steps

- ⇒ Maintain high immunization coverage rates during early childhood.
- ⇒ Monitor coverage levels to help direct strategies to increase vaccination and reduce the risk of future disease outbreaks.
- ⇒ Educate health care providers about and promote commitment to proper immunization practices, and educate the public about the protective health benefits of vaccination.

**Objective 2** - Maintain immunization coverage at 95% for children in nursery school and kindergarten.

### Action Step

- ⇒ Enhance outreach activities provided by local health department staff in order to identify children who are delinquent in their immunizations.

Immunization requirements for kindergarten and nursery school are the most effective interventions Maryland has to ensure that children are appropriately vaccinated.

**Objective 3 -** Increase to 90% the rate of immunization coverage (influenza and pneumococcal) among adults 50 years of age or older; and to 60% for high risk adults 18 to 49 years of age.

### **Action Step**

- ⇒ Target those with high-risk conditions (e.g. heart disease, diabetes, asthma) and persons living in institutional settings.

Vaccination is an effective strategy to reduce illness and death due to influenza and pneumococcal disease. Current coverage levels among adults vary widely by age group. Results from CDC's 1997 Behavioral Risk Factor Surveillance System for Maryland found that 63% of adults 65 years of age and older were vaccinated against influenza and only 41% were vaccinated against pneumococcus. Both influenza and pneumococcal vaccines are covered by Medicare, which supports the feasibility of vaccinating greater number of older adults. As the population ages, an increasing number of adults will be at risk for death and illness from influenza and pneumococcal disease.

**Objective 4 -** Maintain at 95% the number of two-year-old children who receive vaccinations as part of comprehensive primary care.

### **Action Step**

- ⇒ Educate health care providers about and promote commitment to proper immunization practices.

This strategy will help increase the number of children who receive vaccination as part of comprehensive primary care. Vaccine distribution data from the Vaccine For Children Program shows that approximately 95% of children receive vaccine from a primary care provider. Parents whose children have a regular source of primary care prefer to have their children vaccinated at the office of the primary care provider rather than be referred to another provider to be immunized. Referrals from a primary care provider to a clinic cause missed opportunities for immunization, which are associated with incomplete vaccination. Interventions to bring incompletely vaccinated children to their primary care provider are also known to improve other health aspects such as lead exposure and anemia screening.

**Objective 5** - Increase the percentage of immunization providers who have systematically measured the immunization coverage levels in their practice population.

### **Action Step**

- ⇒ Assess practice-based coverage levels and provide feedback of those data to the providers.

This has been an effective strategy for increasing immunization of children served by a given practice. Many providers overestimate the immunization coverage rates of their patients. Managed care organizations have begun reporting immunization coverage levels using Health Plan Employer Data and Information Set (HEDIS) criteria in order to evaluate quality of care. Working with the Advisory Committee on Immunization Practices, the American Academy of Pediatrics, and the American Academy of Family Practitioners, who have also recommended practice-based assessment, will help reach this goal.

**Objective 6** - Increase the number of children enrolled in a fully functional population-based immunization registry.

### **Action Step**

- ⇒ Support development of a statewide immunization registry.

A fully functioning registry includes the capabilities to automatically enroll all children at birth, give provider access to a child's complete immunization history, be able to recommend needed immunizations, recall children who are overdue for immunizations, and assess coverage at the practice and geographical levels. Currently Maryland has approximately 6,000 children enrolled in a registry, the majority of whom are in Baltimore City. The Maryland Department of Health and Mental Hygiene, along with the American Academy of Pediatrics, remains committed to reaching this goal.

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## **Partners**

Centers for Disease Control and Prevention • Epidemiology and Disease Control Program, DHMH • Howard Community College • Maryland Chapter of American Academy of Pediatrics • Maryland Chapter of American Academy of Family Practitioners • Maryland Immunization Partnership • Maryland Local Health Departments • Maryland Partnership for Prevention • MedChi—the Maryland State Medical Society

## **Focus Area 2 -Prevention of Infections Acquired Within Healthcare Facilities (Nosocomial Infections)**

### **Definitions**

A nosocomial infection is an infection acquired within a health care facility. To be considered associated with a facility, the infection must not have been present or incubating at the time of admission to the facility. An infection that develops within 48 to 72 hours of admission is generally considered to be community-acquired, not healthcare facility-acquired, because it is likely that it was incubating prior to admission.

The Department of Health and Mental Hygiene provides infection control guidance and recommendations to professionals at all Maryland healthcare facilities—hospitals, nursing homes, and home health agencies—through a process called consultation. The consultations cover many topics, such as handling medical waste, hepatitis B vaccination for healthcare workers, and preventing antibiotic resistance.

### **Problem**

Healthcare facility-acquired, or nosocomial, infections occur at a rate of approximately five to 10 per 100 admissions in U.S. hospitals. They result in increased morbidity and mortality and have a direct cost of up to \$10 billion annually. Nosocomial infections occur at approximately the same rates in Maryland, although since Maryland law protects the confidentiality of certain medical information, specific rates of some infections for individual Maryland hospitals are not obtainable. A rate of over five infections per 100 admissions may indicate a nosocomial outbreak situation.

As the 1990s ended, one particular nosocomial infection, Legionnaires' disease, received much attention in Maryland. Nationwide, up to 15% of all nosocomial pneumonias are cases of Legionnaires' disease, and the rate is probably similar in Maryland. Maryland health care facilities employ a variety of strategies to prevent nosocomial Legionnaires' disease, and a Maryland task force (The Scientific Work Group to Study Legionella Bacteria in Water Systems) examined the scientific literature to determine which prevention strategies are most effective.

For consultations to be effective, they must be completed in a timely manner. Systematic tracking of the response time for consultations began near the end of the 1990s.

### **Determinants**

Many factors, only some of which are amenable to manipulation, affect nosocomial infection rates. Some of these factors are invasive medical procedures, immunosuppressive therapies, the emergence of antibiotic resistant organisms, and exposure to other infected patients. Factors unique to the individual also make some persons more susceptible to nosocomial infections, including advanced age, poor nutritional status, and underlying illnesses.

## High-Risk Sub-Populations

Certain persons are known to be at increased risk for acquiring nosocomial infections, including:

- Persons with severe underlying disease
- Persons undergoing invasive diagnostic and treatment modalities
- Persons with compromised immune systems
- Persons exposed to infectious organisms in the facility

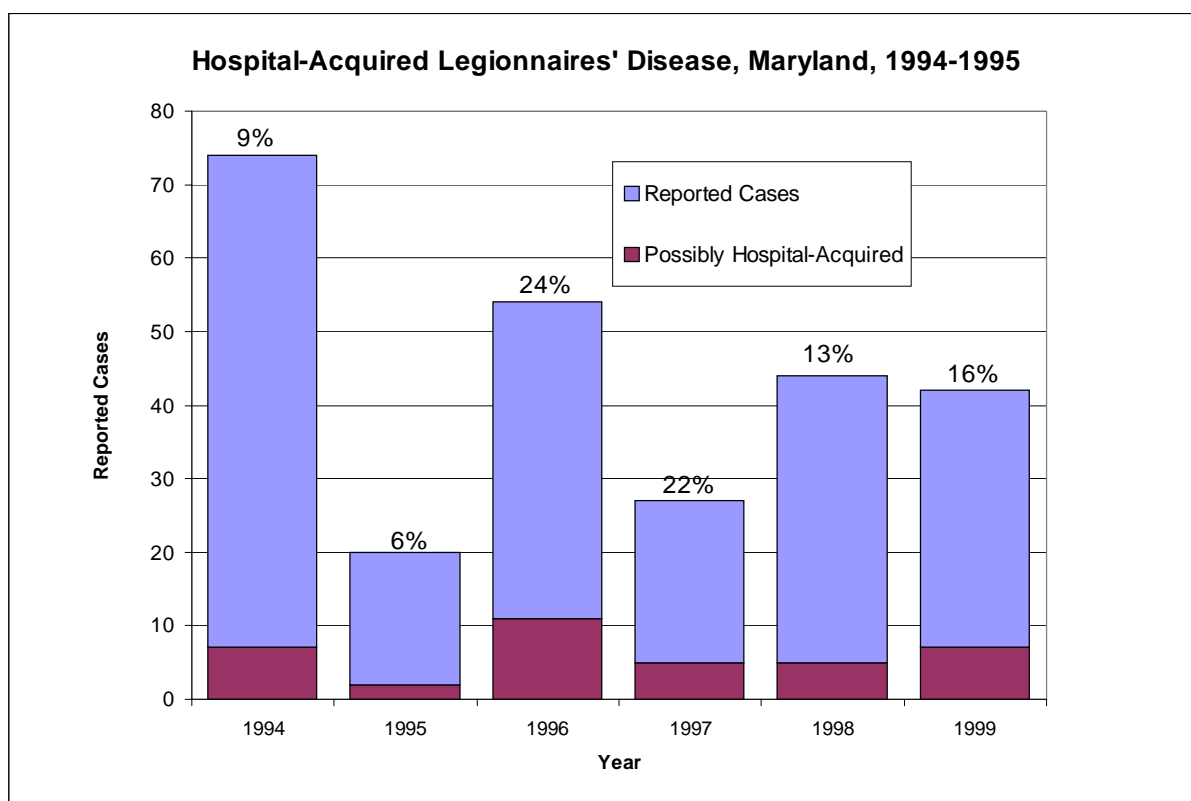
**Objective 1** - By 2010, complete 95% of consultations within 48 hours.

**Objective 2** - By 2010, develop enhanced surveillance for nosocomial infections within Maryland home health agencies and subacute and long-term care facilities.

**Objective 3** - By 2010, improve the recognition of nosocomial Legionnaires' disease and reduce the rate from approximately 15% to <10% of nosocomial pneumonias.

## Action Steps

- ⇒ Develop a system to answer infection control queries within 48 hours of their request.



Source: Maryland, 1994-99 (MERSS)

Note: The Healthy Maryland 2010 objective is to maintain the proportion of hospital-acquired Legionnaires'

- ⇒ Continue to monitor consultation response times.
  - ⇒ Continue to provide expert infection control consultation in the following areas:
    - Infectious disease processes
    - Surveillance and epidemiologic outbreak investigation
  - ⇒ Promote:
    - Prevention and control of the transmission of infectious agents.
    - Infection control program management.
    - Infection control education.
  - ⇒ Develop nosocomial Legionnaires' disease prevention guidelines using input from the Scientific Work Group to Study Legionella Bacteria in Water Systems.
- 

## Partners

Association for Professionals in Infection Control and Epidemiology, Inc.: Greater Baltimore Chapter, Delmarva Chapter, Metro Washington D.C. Chapter • Department of Health and Mental Hygiene, Infection Control Professionals • Epidemiology and Disease Control Program, DHMH • Maryland Hospital Association • Maryland Local Health Departments • Scientific Work Group to Study Legionella Bacteria in Water Systems (composed of specialists from the University of Maryland, Baltimore County; Johns Hopkins Hospital; Franklin Square Hospital; Science Applications International Corporation; and J.F. Korner Consulting, Inc.)

## Related Reports

American Journal of Infection Control. (1996). National nosocomial infections surveillance (NNIS) report. *American Journal of Infection Control*, 24, 380-388.



## Focus Area 3 -Preventing Diseases Spread By Animals and Insects (Zoonotic and Arthropod-Borne Diseases)

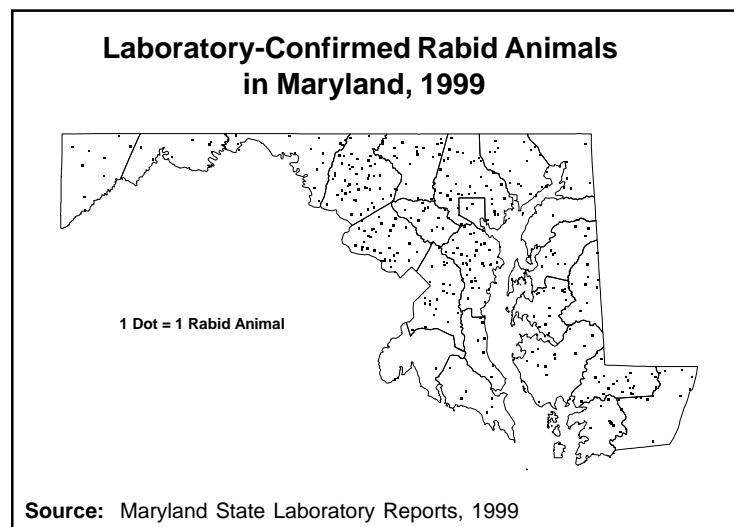
### Definitions

Zoonotic diseases are infections which are naturally transmitted between vertebrate animals (animals with a spinal column, like dogs, cats, and raccoons) and humans. Arthropods are a class of animals that include insects, spiders, and ticks. Like vertebrate animals, arthropods can spread infections to humans and other animals.

### Problem

Zoonotic and arthropod-borne diseases occur throughout Maryland. Some, like salmonellosis are common. Others, like Lyme disease, are less frequent. Still others, like rabies, currently exist only in other animals, but can spread to humans. However, regardless of how common certain zoonotic and arthropod-borne diseases are, they remain important public health problems in Maryland.

Rabies, for example, is found in a variety of animals in all areas of the State. If a human is bitten by a rabid animal, unless the person undergoes appropriate treatment, the resulting disease is almost invariably fatal. The last human rabies death in Maryland was in 1976, but a Virginia man died of rabies in 1998. Lyme disease, which is a tick-borne disease, is another important public health problem in Maryland. The number of confirmed cases of Lyme disease reported increased dramatically from 185 cases in 1992 to more than 800 in 1999. Furthermore, newly emerging zoonotic and arthropod-borne diseases pose a threat to Maryland. For example, in August 1999, an outbreak of West Nile virus occurred in New York City. A West Nile virus-infected crow was found as far south as Baltimore. Other mosquito- and tick-borne diseases also can occur in Maryland citizens.



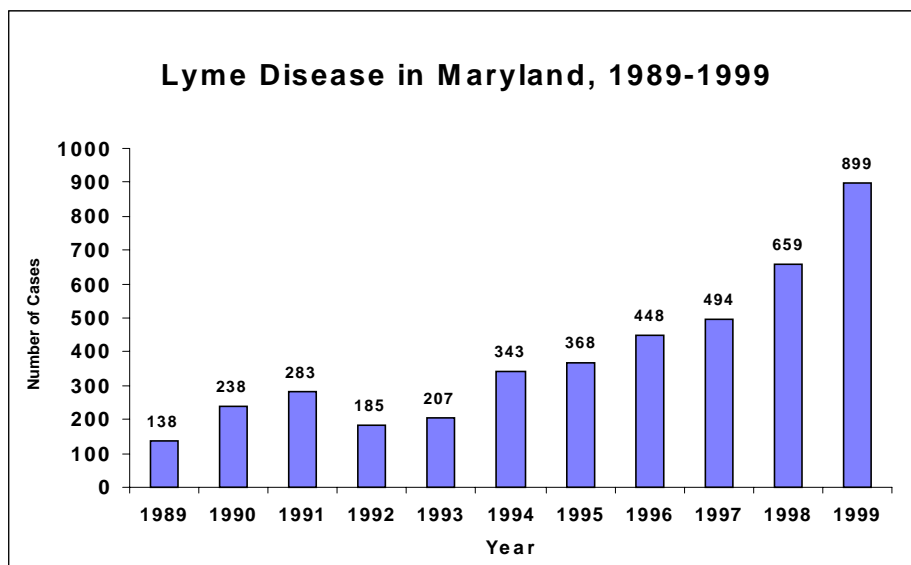
### Major Determinants

Zoonotic and arthropod-borne diseases develop when there is contact between humans and disease-carrying animals. Such contact occurs frequently—even in people who do not have pets or work with animals. That is why preventing zoonotic and arthropod-borne diseases requires many different approaches, including education of humans about individual prevention measures, vaccination of animals when possible, and wildlife control.

Humans may develop rabies if exposed to a rabid animal. In Maryland, rabies is found most often in raccoons, foxes, cats, bats, groundhogs, and skunks posing a potential threat to humans. Other mammals, including dogs and farm animals can also get rabies.

Lyme disease results from frequent environmental exposure to tick-infested habitats, which exist throughout Maryland.

Surveillance for arthropod-borne viral diseases among humans is limited, because health care providers often do not test for these illnesses, so locally relevant predictors of such diseases in humans are not well characterized. These predictors might be better known if human surveillance is improved and correlated with animal surveillance data. Evidence of increased or early disease activity in animal populations may herald an outbreak of arboviral illness in humans.



**Source:** Maryland MERSS, 1989-1999

**Note:** Number of cases of Lyme Disease reported to Maryland local health departments from 1980-1999 (MERSS).

**Objective 1** - Prevent any human rabies cases from occurring over the next decade through continuation of a comprehensive rabies prevention program.

**Objective 2** - By 2010, reduce by 50% the number of rabid animals (wild animals as well as pets and domestic animals) in Maryland.

**Objective 3** - By 2010, reduce the cases of Lyme disease by 15 %; from 899 in 1999 to 764 in 2010.

### Action Steps

- ⇒ Provide prevention/education programs that deal with zoonotic and arthropod-borne diseases for a variety of audiences throughout Maryland.
- ⇒ Enhance effective animal control programs (removal of stray animals, spay/neuter programs) and animal vaccination programs to reduce human exposures to possibly rabid pets (i.e. dogs, cats, and ferrets).

- ⇒ Assist in the creation and evaluation of oral rabies bait programs for wild animals in Maryland.
  - ⇒ Provide up-to-date educational materials to local health departments and to other Maryland residents, including current materials about the appropriate use of repellants and pesticides, to reduce human exposures to ticks, mosquitoes, and other disease-causing arthropods.
  - ⇒ Develop a surveillance program to detect West Nile virus and other arthropod-borne diseases in Maryland.
  - ⇒ Increase collaboration with other State agencies involved in animal control, disease reporting, and prevention activities.
- 

## Partners

Baltimore Zoo • Epidemiology and Disease Control Program, DHMH • Maryland Department of Agriculture • Maryland Department of Natural Resources, Wildlife and Heritage Division • Maryland Local Health Departments • Mosquito Control and Animal Health Divisions • United States Department of Agriculture • Virginia-Maryland Regional College of Veterinary Medicine

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## Focus Area 4 - Reducing and Controlling Foodborne Illness

### Definitions

Foodborne illness refers to illness resulting from the consumption of food contaminated with infectious microorganisms or toxic substances.

A foodborne illness outbreak is defined as two or more epidemiologically-related cases of illness following the consumption of a common food or a single case of botulism, cholera, mushroom poisoning, or fish poisoning (ciguatera poisoning, scombroid poisoning, paralytic shellfish poisoning, or other neurotoxic shellfish poisoning).

A foodborne pathogen is an infectious microorganism (bacteria, virus, parasite, or fungus) that can cause foodborne illness.

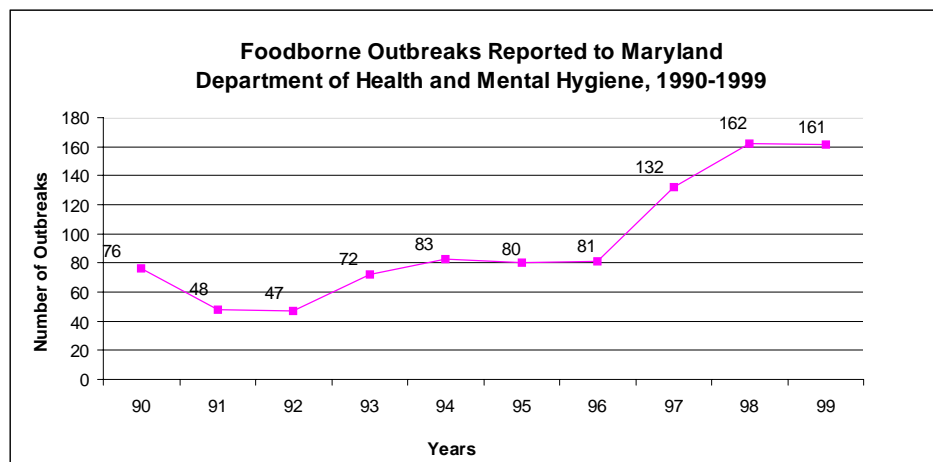
### Problem

Foodborne illnesses are common. According to the Centers for Disease Control and Prevention (CDC), approximately 60 to 80 million foodborne infections occur each year in the United States, resulting in at least 9,000 deaths annually.

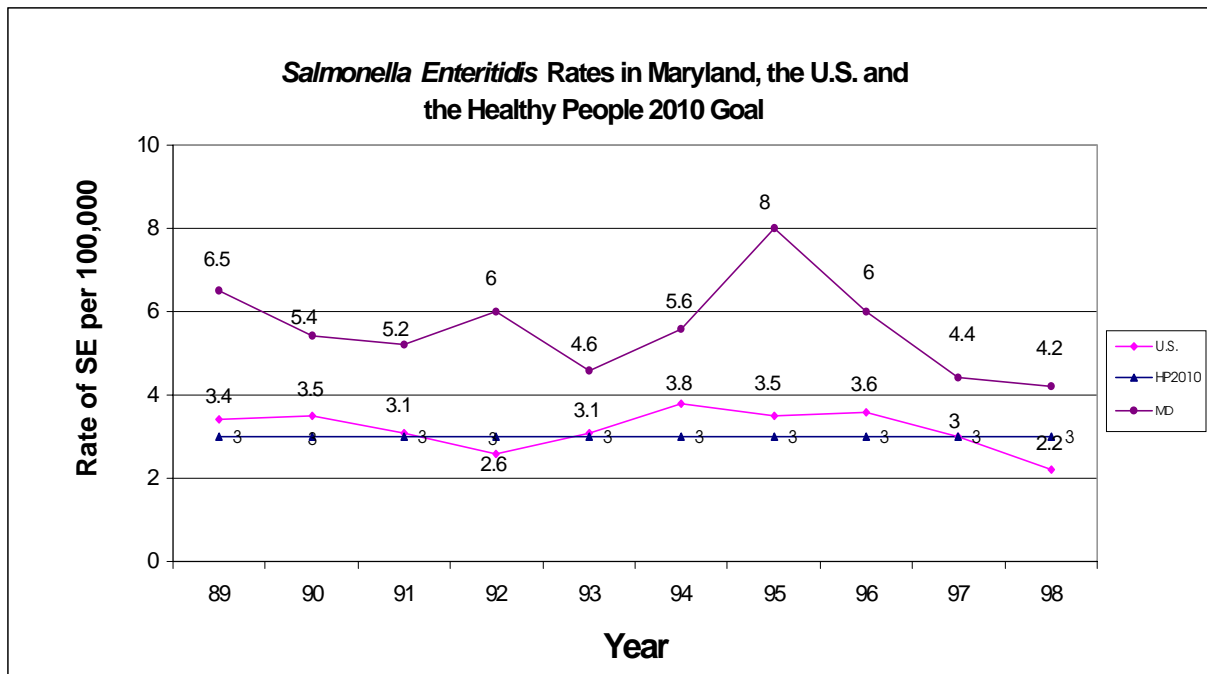
Foodborne illnesses can cause other complications such as localized infections, septicemia, abortion, arthritis, hemolytic uremic syndrome (HUS), and Guillain-Barre syndrome. Medical costs and lost wages associated with salmonellosis, one type of foodborne illness, are estimated to be \$1 billion each year. New foodborne pathogens (like cyclospora, a parasite, and *E. coli* O157:H7) continue to emerge.

The number of foodborne outbreaks has increased in Maryland over the past 10 years. The highest numbers of foodborne outbreaks were reported in 1998 and 1999. In 1999, there were 161 foodborne outbreaks reported, four times the number reported in 1992.

*Salmonella* serotype *Enteritidis*, a common bacterial foodborne pathogen, is a frequent cause of foodborne illness in Maryland. Overall, the rates of *Salmonella Enteritidis* have been declining in Maryland. Over the last decade, the peak case rate was in 1995 (8.0 cases per 100,000 population). By 1998, the rate declined to 4.2 cases per 100,000, which is almost half the case rate reported in 1995. However, the *Salmonella Enteritidis* rates in Maryland are still much higher than the rates in the United States overall.



Source: Maryland Outbreak Database. Division of Outbreak Investigation, EDCP, DHMH



**Source:** Maryland Electronic Reporting and Surveillance System (MERSS), Division of Communicable Disease Surveillance, EDCP, DHMH, CDC Foodborne and Diarrheal Diseases Branch

**Note:** The U.S. rates are provided by CDC's Rates of Isolation of *Salmonella Enteritidis* by Year 1989-1998. This rate is used as an estimation of the U.S. case rate.

## Determinants

Factors that are known to contribute to foodborne illnesses include inadequate handwashing by persons preparing food, consumption of inadequately-washed produce, consumption of raw and undercooked meats, improper storage of foods, and cross-contamination of cooked or ready-to-serve foods with raw meat products. As the 20th Century closed, nationally, the overall incidence of reported foodborne outbreaks remained stable. However, the proportion of outbreaks caused by non-traditional foods like fruits and vegetables has been increasing. Newly identified pathogens, different detection methods, changes in consumer behavior, new agricultural practices, and increased importation of foods have all contributed to this increase. Resistance of foodborne pathogens to antimicrobial agents may also be a factor contributing to foodborne illnesses.

## Population At Risk

All Marylanders, particularly:

- elderly;
- infants; and
- persons with impaired immune systems.

**Objective 1** - By 2010, reduce all foodborne outbreaks by 20% (161 reports in 1999 to 123).

**Objective 2** - By 2010, reduce the incidence of *Salmonella Enteritidis* infections from 4.0 cases per 100,000 in 1999 to no more than 2.0 cases per 100,000 population.

### **Action Steps**

- ⇒ Rapidly identify foodborne outbreaks and implement control measures to prevent additional illnesses.
  - ⇒ Promote the use of proper food handling procedures in all licensed food services facilities and in the home (e.g., provide education on handwashing).
  - ⇒ Increase the number of training workshops in safe food handling procedures through certification courses developed by local health departments.
  - ⇒ Increase public awareness of safe food handling practices (e.g., distribute fact sheets on foodborne illnesses, post updated information on foodborne illnesses on DHMH Web site).
  - ⇒ Promptly investigate every reported case of *Salmonella Enteritidis* and other foodborne pathogens to determine possible exposures.
- 

### **Partners**

Centers for Disease Control and Prevention • Central Atlantic States Association of Food and Drug Officials (CASA) • Epidemiology and Disease Control Program, DHMH • Food and Drug Administration (FDA) • Johns Hopkins University School of Public Health, Student Outbreak Response Team • Maryland Local Health Departments • Restaurant Association of Maryland • United States Department of Agriculture (USDA) • University of Maryland, Baltimore County

### **Related Reports**

Maryland Department of Health and Mental Hygiene, Division of Outbreak Investigation. (1997, June). Foodborne disease investigations training.

U.S. Department of Health and Human Services, National Center for Infectious Diseases, Division of Bacterial and Mycotic Diseases, Food and Diarrheal Diseases Branch. (1989-1998). *Salmonella surveillance*.

## Focus Area 5 - Preventing Tuberculosis

### Definition of Tuberculosis

Tuberculosis (TB) is an airborne communicable disease that remains one of the most deadly infectious respiratory diseases in the world. In 1998, the World Health Organization (WHO) attributed approximately eight million cases and about two million deaths to tuberculosis. The disease is caused by *Mycobacterium tuberculosis* which is carried through the air as tiny droplets that are generated when an individual with pulmonary or laryngeal TB coughs, speaks, sings, or sneezes. Infection and disease occur when the bacteria are inhaled and lodge in the alveoli of the lungs. An individual infected with *M. tuberculosis* has a 10% chance of developing disease over his or her life; if also infected with HIV, the risk of developing active disease increases to 10% per year.

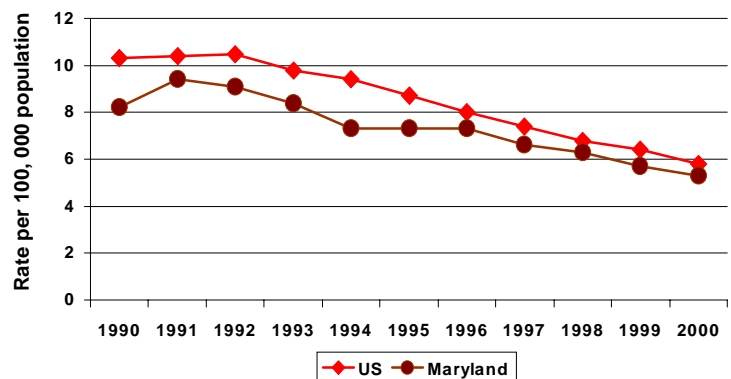
Each TB case requires comprehensive follow-up to assure completion of at least six months of treatment and to prevent the development of drug resistance. Even the most uncomplicated case of TB requires the patient to take multiple antibiotics for six months. Complicating factors, such as HIV/AIDS, require even more extensive monitoring and longer treatment regimens.

### Problem

The rates of tuberculosis have remained fairly stable over the past decade in Maryland, primarily due to the adoption of directly observed therapy as the model of care delivery by local TB control programs. In 2000, 282 cases of tuberculosis were reported in Maryland. Although tuberculosis rates in Maryland overall showed a steady decline during the 1990s, cases are increasing within certain populations. Populations of particular concern include young adults co-infected with HIV, prisoners, refugees and immigrants, the homeless, and intravenous substance abusers.

In 1999, for the first time, foreign-born patients comprised over 50% of all tuberculosis cases diagnosed in Maryland. In Montgomery County, foreign-born individuals accounted for 95% of all tuberculosis cases in 1999. Poverty, lack of access to health care, and HIV co-infection continue to be associated with higher TB case rates in certain population sub-groups.

**Tuberculosis Incidence Rates in Maryland and the U.S., 1990 to 2000**



Source: DHMH, CPHA, EDCP, Division of TBCRMH, 2000

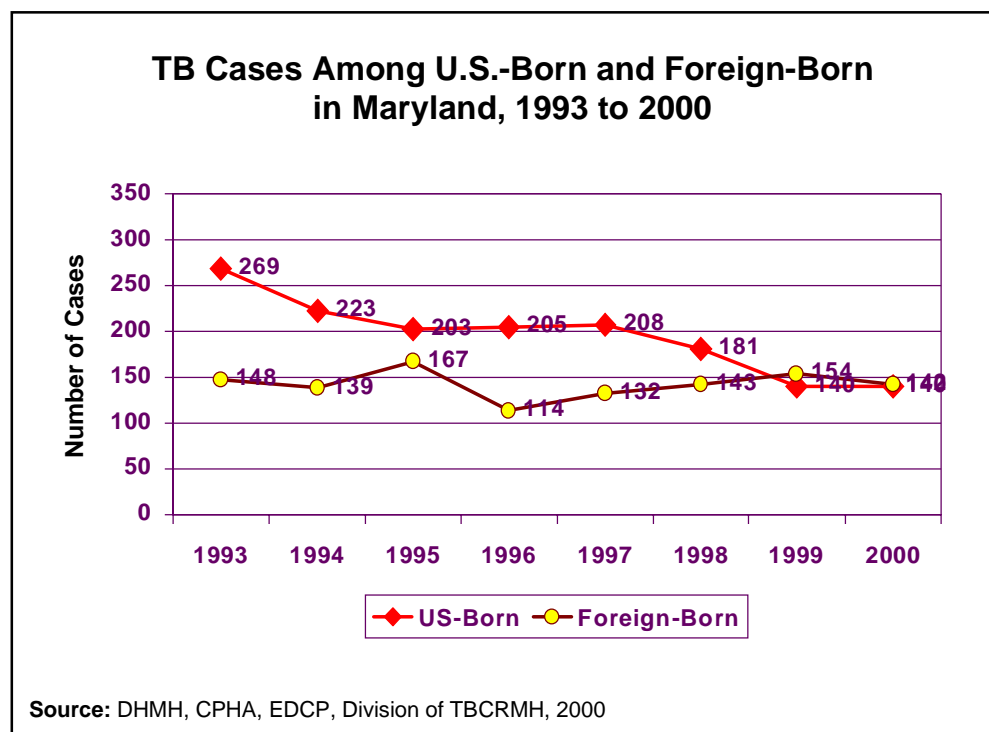
Multiple drug resistant TB (TB strains resistant to the two primary tuberculosis medications, rifampin and isoniazid), while an increasing problem worldwide, accounts for less than one percent of Maryland TB cases. However, the number of Maryland TB cases who carry strains resistant to at least one of these first-line medications is increasing.

Current anecdotal evidence suggests delays in diagnosing active TB may be occurring in the State. This is also a concern.

## Determinants

Tuberculosis rates from 1990-2000 are depicted in the preceding graphic. The national goal of reaching a case rate of 1.0 per 100,000 is not likely to be achieved in Maryland with an increasing refugee population and increasingly difficult to treat population sub-groups. We would expect to achieve a rate of 2.0 per 100,000 by 2010 if funding levels are maintained and we are able to contain drug-resistant disease, increase treatment for latent tuberculosis infection (particularly in the foreign-born), and are able to increase access to new surveillance and laboratory technologies for local health department programs.

Steadily declining rates of TB in Maryland's U.S.-born population are attributed to the use of Directly Observed Therapy (DOT) for most of the past decade across the state, a declining, elderly U.S.-born TB-infected population, and very little drug resistance. Factors that contribute to Maryland's growing foreign-born population are immigrants choosing to resettle in Maryland, the use of foreign-born workers by Maryland businesses, the attraction of Maryland universities and colleges to foreign students, and the relocation of refugees from foreign countries.





**Objective 1** - Reduce the Maryland tuberculosis case rate from 5.6 per 100,000 in 1999 to 2.0 per 100,000 in 2010.

**Action steps**

- ⇒ Maintain a 90% or better completion rate for treatment of all cases.
- ⇒ Continue the use of Directly Observed Therapy (DOT) for administering TB treatment. Continue provision of anti-TB medications to patients without charge.
- ⇒ Increase the average number of contacts to tuberculosis cases identified and screened. Provide treatment to those found to be infected. Ensure treatment is completed.
- ⇒ Develop new strategies for reaching high-risk populations. Increase screening activities; provide treatment of latent infection; with DOT if necessary.
- ⇒ Develop and conduct education for medical professionals regarding tuberculosis.

**Objective 2** - Decrease delays in the diagnosis and treatment of active tuberculosis disease by 50%.

**Action Steps**

- ⇒ Evaluate reasons for delays in diagnosis of active disease. Educate health care providers based on results.
- ⇒ Promote aggressive identification of contacts to confirmed and suspected TB cases by developing and using standardized tools, ensuring close follow-up and monitoring of investigation results, and providing for completion of treatment for those infected.
- ⇒ Support the acquisition of rapid diagnostic techniques for TB by the State Laboratory so that suspected TB cases can be confirmed and reported within 48 hours.
- ⇒ Eliminate unnecessary and costly screening of population groups in which the prevalence of TB infection is extremely low, so use of limited health department resources can be directed to high-risk populations.

**Objective 3** - Increase TB prevention and control efforts in high-risk populations throughout the State.

Action Steps

- ⇒ Develop new strategies with local health departments and community groups for reaching high-risk and socially disenfranchised populations utilizing the results of local surveillance and research.
- ⇒ Provide for the treatment of infected individuals and ensure treatment is completed using available resources, e.g. DOT, community outreach workers, etc.
- ⇒ Continue support of “language line” and other translation services for local health department activities.

Partners

AIDS Administration, DHMH • American Lung Association (Maryland Affiliate) • The Annie E. Casey Foundation • Baltimore City Health Department • Baltimore Medical Systems, Inc. • Choptank Community Health Systems, Inc. • Eastern Shore Area Health Education Center • Epidemiology and Disease Control Program, DHMH • Greater Baden Medical Services, Inc. • The Johns Hopkins Medical Institution, Schools of Medicine and of Public Health • Maryland Department of Public Safety and Correctional Services • Maryland Governor’s Commission on Migratory and Seasonal Farm Labor • Maryland Local Health Departments • Maryland Office of New Americans (MONA) • Maryland State Board of Education • Maryland State Department of Education, Migrant Education Service Center and School-Based Health Programs • Maryland Thoracic Society • Maryland Tuberculosis Expert Panel • Med-Chi—the Maryland State Medical Society • Metropolitan Council of Governments (COG) • National Jewish Medical and Research Center for Respiratory Disease • New Jersey Medical School, National Tuberculosis Center • Telemon Corporation • Three Lower Counties Community Services • University of Maryland, Baltimore

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Cross-Reference Table for Immunization and Infectious Disease	
See Also	
Washington County .....	275

# REDUCING FIREARM-RELATED DEATHS



## Definition

A firearm-related death is defined as any fatal injury resulting from the discharge of a weapon from which a projectile is propelled by an explosive charge.

## Problem

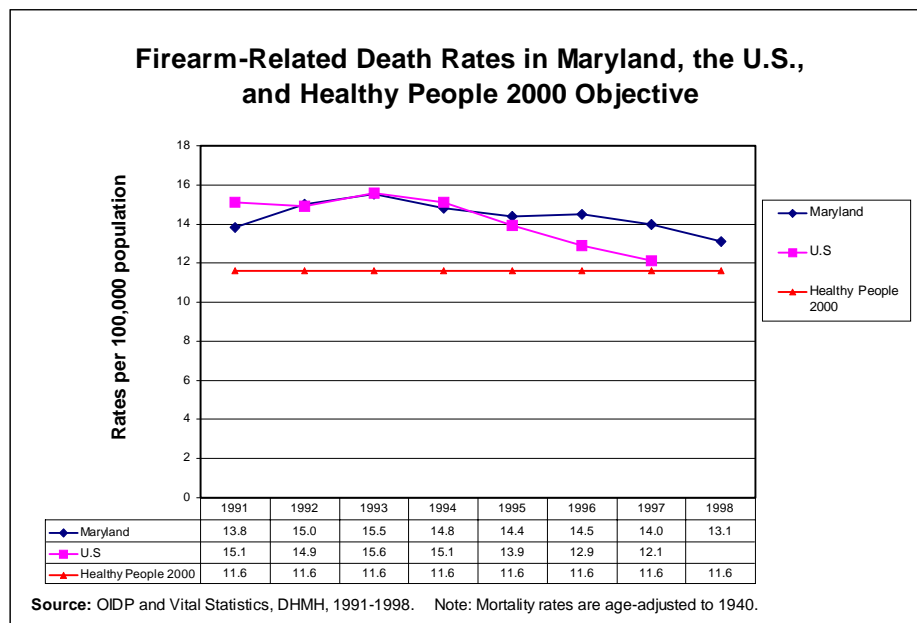
Firearm-related injuries are the leading cause of injury deaths occurring in the State of Maryland. From 1989 to 1998, the firearm-related death rate declined overall, with the lowest rate occurring in 1998 (13.1 deaths per 100,000 population) and the highest rate occurring in 1993 (15.5 deaths per 100,000 population). Since 1991, the number of firearm-related deaths has surpassed the number of motor vehicle-related deaths in Maryland. In addition, the firearm-related death rate in Maryland has surpassed that of the United States every year since 1992. Maryland's firearm-related death rate has fallen short of the Healthy People 2000 goal of 11.6 deaths per 100,000 population every year for the last 10 years.

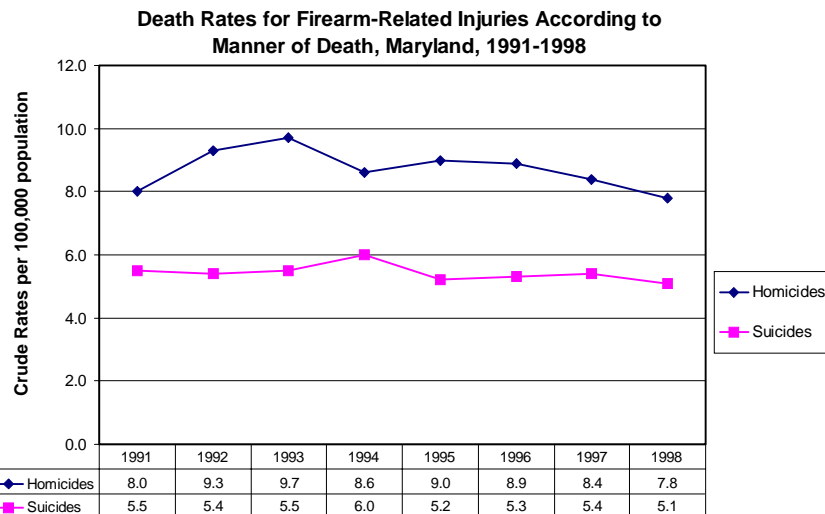
## Major Determinants

Having a gun in the home is a major determinant for homicide- and suicide-related firearm deaths. According to the Johns Hopkins Center for Gun Policy and Research, having a gun in the home increases the risk of homicide of a household member by three times and the risk of suicide by a family member by five times. The risk of suicide for an adolescent or young adult in a home with a gun is higher still.

In Maryland, the crude death rates for firearm-related injuries caused by homicides slightly decreased from 8.0 per 100,000 Maryland residents in 1991 to 7.8 per 100,000 Maryland residents in 1998. Likewise, the crude death rates for firearm-related suicides decreased from 1991 to 1998 (5.5 per 100,000 population to 5.1 per 100,000 population). The rate for unintentional fire-

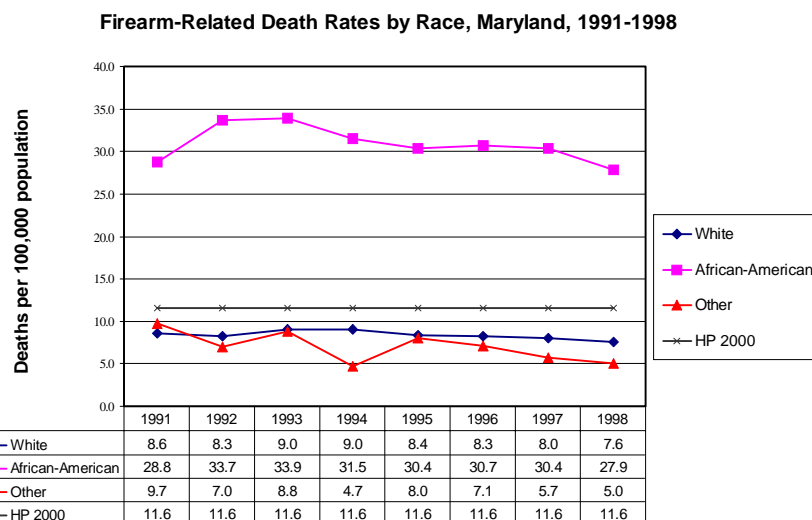
arm-related injuries was too unreliable to estimate since there were fewer than eight deaths per year. In 1998, homicides accounted for 59.3% of the 675 firearm-related deaths; suicides were





Source: Office of Injury and Disability Prevention (OIDP) and Vital Statistics, DHMH, 1991-1998

responsible for 38.8%, while 1% were unintentional firearm-related injuries. There were six firearm-related deaths for which intent was not determined (1.6%). In 1993, when the homicide death rates was at its highest (9.7 per 100,000), the death rate for murders committed by known offenders was 2.7 per 100,000 while the death rate for murders committed by strangers was 0.8. The same trend continued in other years. One factor that causes an increase in firearm-related deaths is the fact that guns are ubiquitous consumer products and can be purchased with relative ease. Other contributing factors are alcohol and drug abuse, poverty, and adverse living conditions.



Source: Office of Injury and Disability Prevention (OIDP) and Vital Statistics, DHMH, 1991-1998  
Note: Mortality rates age-adjusted to 1940.

## High-Risk Sub-Populations

African-Americans in Maryland were at a greater risk for firearm-related deaths than whites or other racial

groups. The firearm-related death rate for African-Americans increased from 26.9 deaths per 100,000 population in 1989 to 33.9 in 1993, then decreased to 27.9 in 1998. In contrast, the death rate for whites has consistently decreased over this time period. The firearm-related death rate for whites is under the Healthy People 2000 goal of 11.6 deaths per 100,000 population. In 1998, the Maryland African-American firearm-related death rate of 27.9 deaths per 100,000 population was *140.5% higher than the Healthy People 2000 goal*.

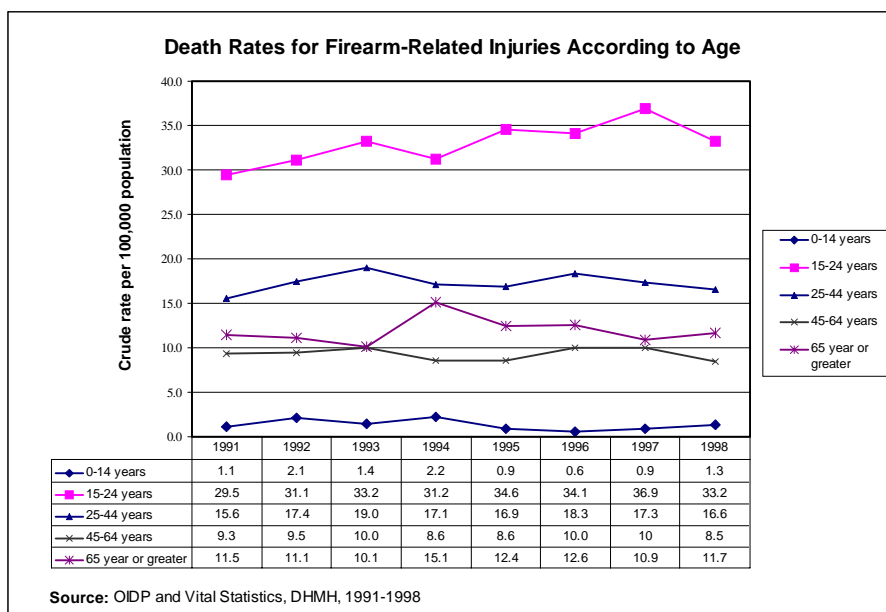
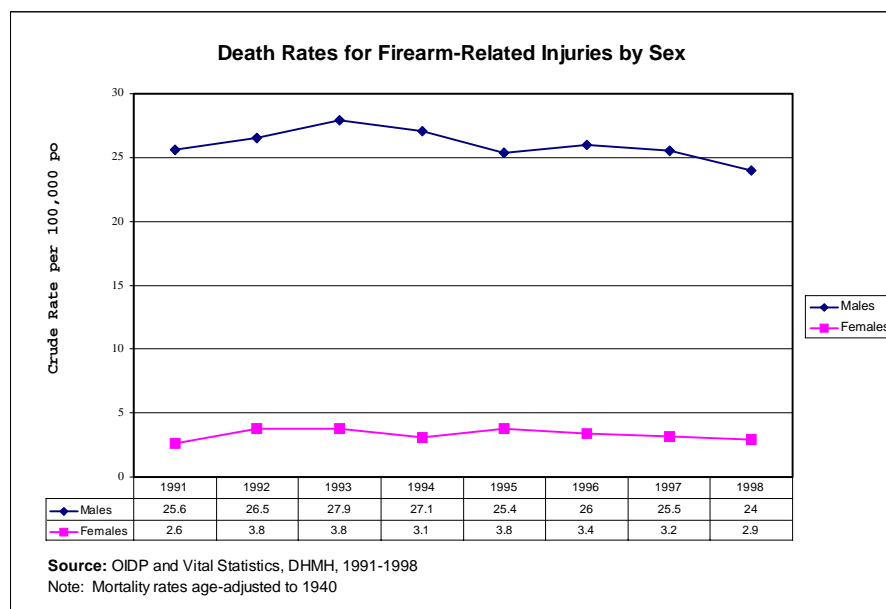
Males also have a significantly higher crude rate for firearm-related deaths than females. In 1991, firearm-related deaths for males (25.6) were *884.6% higher* than that for females (2.6). This trend continued each year, with males suffering 88.7% of the state's firearm-related deaths in 1998, when more than seven males died from injuries for each comparable female death.

Age is also a determinant in death rates for firearm-related injuries. Young people (persons aged 15 to 24 years) have the highest risk of dying from firearm-related injuries in Maryland. The risk to this age group has increased from 29.5 deaths per 100,000 population in 1991 to 33.2 in 1998. This is an increase in the death rate for this age group of more than 12%. Twenty-five to forty-four year olds have the next highest death rate for firearm-related deaths, followed by those 65 or older, those aged 45 to 64, and those aged birth to 14 years.

Two of Maryland's 24 jurisdictions, Baltimore City and Prince George's County, accounted for 56.1% (379 of 675) of the firearm-related deaths in 1998. Baltimore County, Montgomery County, and Anne Arundel County also had a high number of firearm-related deaths with 85, 39, and 32 respectively. For Baltimore City (205 of 231) and Prince George's County (115 of 148), the majority of the firearm-related deaths were homicides. However, the majority of firearm-related deaths for Baltimore (51 of 85), Montgomery (29 of 39) and Anne Arundel (26 of 32) counties were suicides.

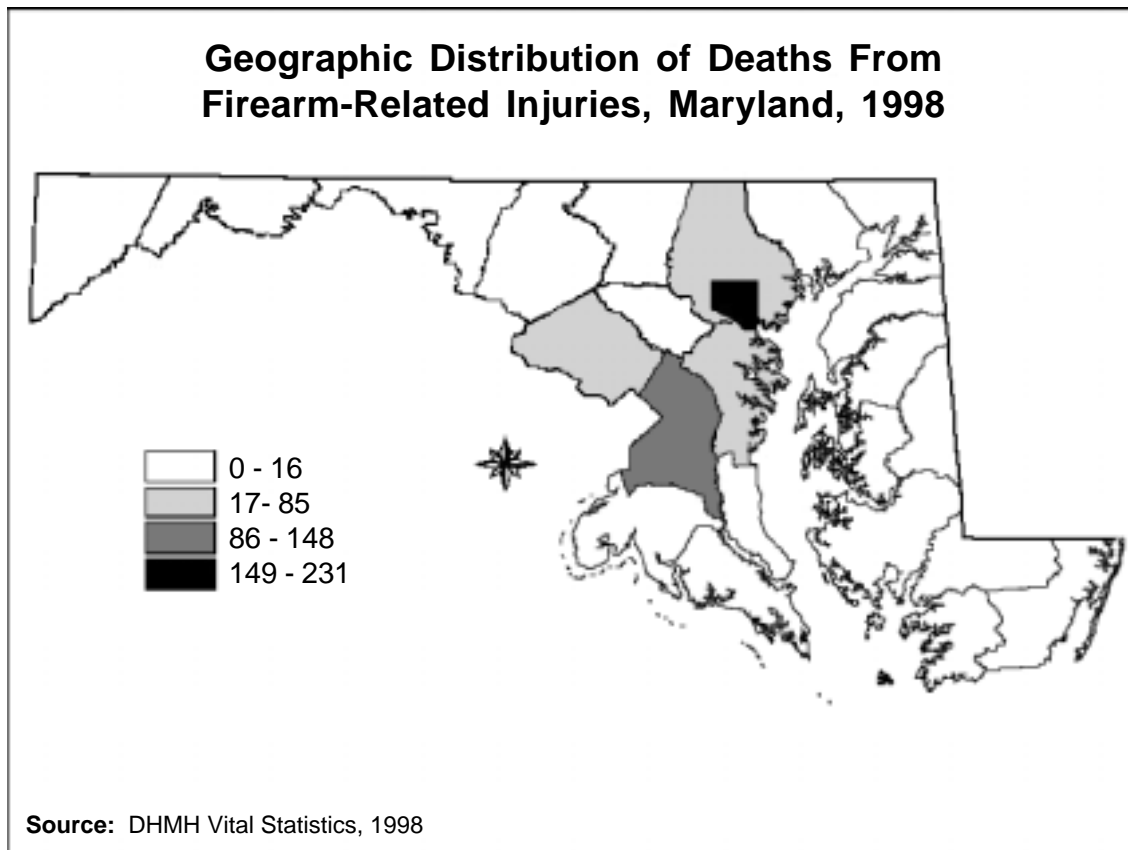
**Objective 1** - To reduce the firearm-death rate for white Marylanders to 4.9 deaths per 100,000; and for African-Americans to no more than 20.0 deaths per 100,000.

**Objective 2** - By 2010, to lessen the gap between African-American and white firearm-related death rates.



## Action Steps

- ⇒ Provide information on firearm safety.
- ⇒ Support legislation that limits the sale of firearms.
- ⇒ Support legislation that mandates the sale of safe guns (i.e., child locks, “smart guns”).
- ⇒ Support legislation to make guns less accessible in the home.
- ⇒ Increase awareness of ‘high-risk situations’ involving firearms in the home.
- ⇒ Propose and support intervention programs for African-American youth to decrease the amount of youth firearm violence.



## Partners

Johns Hopkins University • Maryland Association of County Health Officers • Maryland Local Health Departments • Maryland Local Management Boards • Office of Injury and Disability Prevention, DHMH • University of Maryland, Baltimore County • Violence Policy Center • Violence Research Group

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### Cross-Reference Table for Injury and Violence Prevention

See Also

Talbot County ..... 269

# MATERNAL AND INFANT HEALTH



## Reducing Infant Mortality

### Definition

Infant mortality refers to the death of an infant less than one year old. The infant mortality rate (IMR) is expressed as the number of infant deaths per 1,000 live births in the same year. Infant mortality is a benchmark of a nation's health and an indicator of health status and social well-being.

### Problem

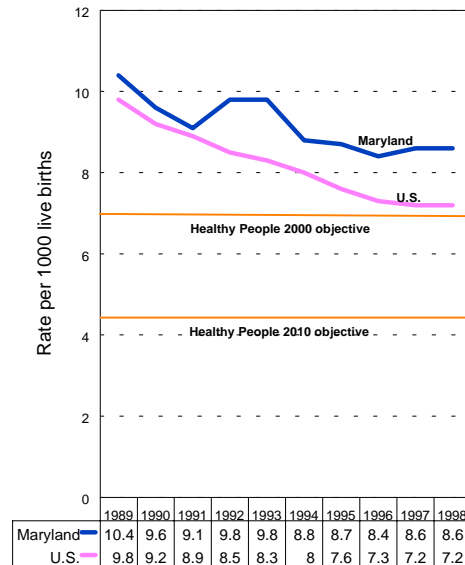
From the late 1980s through the mid-1990s, the infant mortality rate (IMR) in Maryland generally declined and reached an all-time low of 8.4 infant deaths per 1,000 live births in 1996. However, in 1997, the IMR increased to 8.6 deaths per 1,000 births and remained at that level in 1998. Although the IMR in Maryland has consistently been higher than that of the United States, the disparity in recent years has become greater. The 1998 Maryland IMR falls far short of the Healthy People 2000 Goal of 7.0 infant deaths per 1,000 live births. The Healthy People 2010 goal is a reduction of infant deaths to 4.5 per 1,000 live births.

### Determinants

The major causes of infant mortality in Maryland are low birth weight (LBW), birth defects, and sudden infant death syndrome (SIDS). Associated factors include pre-natal infection, multiple gestations, and inadequate pre-natal care for high-risk pregnancies.

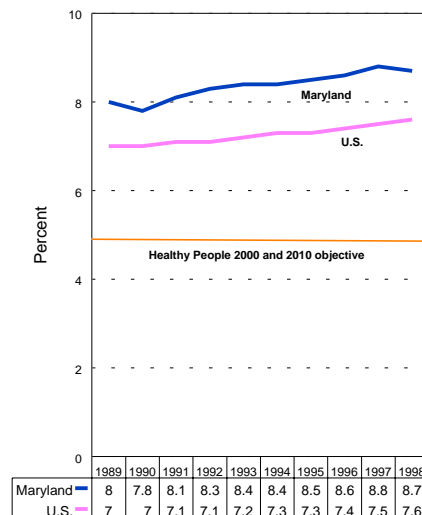
Birthweight is one of the most significant predictors of an infant's subsequent health and survival. In contrast to the decline in IMR, the rate of low birth weight has slowly increased during the 1990s. In 1998, the Maryland LBW rate was 16.7% higher than the U.S. rate and 74% higher than the Healthy People 2000 goal of five deaths per 1,000. The increase in low birthweight births is related to an increase in multiple gestations.

Infant Mortality Rate, Maryland and the United States, 1989-1998.



Source: Maryland Vital Statistics, 1998 Annual Report and National Vital Statistics System (NVSS), CDC, NCHS, 1998

Percentage of Low Birth Weight Infants, Maryland and the United States, 1989-1998.



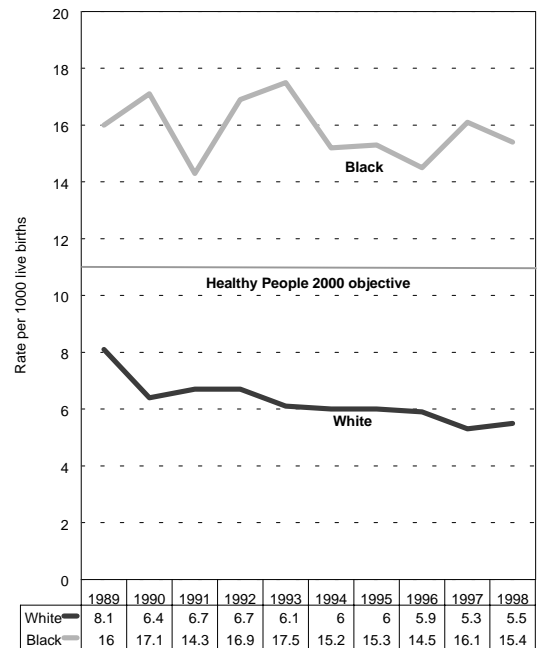
Source: Maryland Vital Statistics, 1998 Annual Report and National Vital Statistics System (NVSS), CDC, NCHS, 1998



African-Americans have significantly higher IMR and low birth weight rates than other racial groups. In the U.S. and Maryland, the IMR for African-Americans has always been much higher than for whites. In 1998 the Maryland African-American IMR was 15.4, which is higher than the Healthy People 2010 goal of 4.5 deaths per 1,000 births for all ethnic groups. Two of Maryland's 24 jurisdictions, Baltimore City and Prince George's County, accounted for 45% (272 of 601) of the 1998 infant deaths in Maryland. This racial disparity exists even in Maryland's most affluent communities. In Montgomery County, with one of the highest per capita and median incomes in the state and nationally, the 1998 Maryland Vital Statistics reflect a 2.5 times disparity between the African-American IMR (15.1 deaths per 1,000 births) and the white IMR (5.9 deaths per 1,000 births).

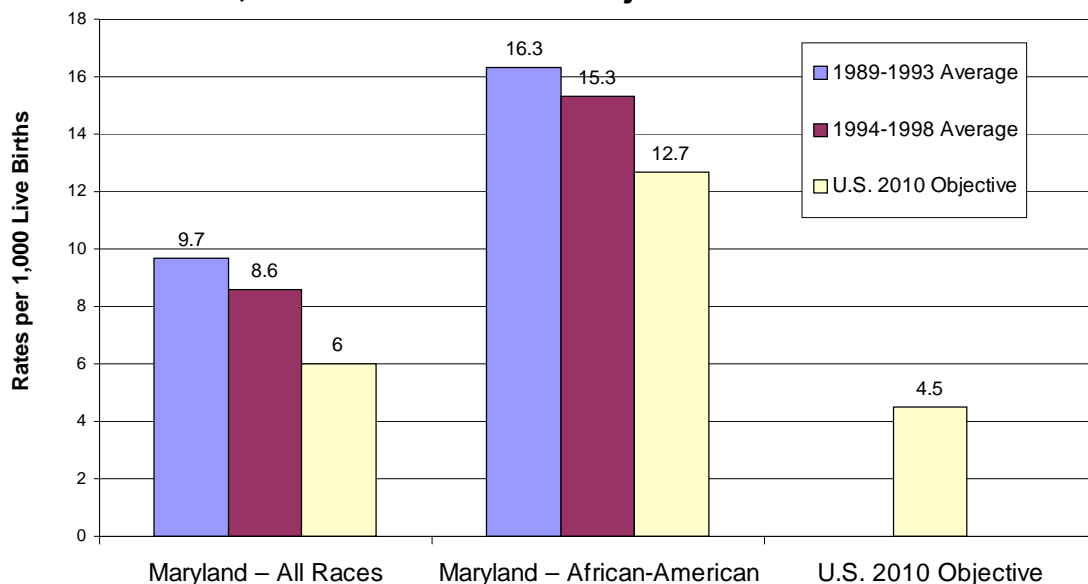
Research has shown that a non-prone sleeping position (sleeping on the back rather than the stomach) greatly reduces the risk of SIDS among healthy full-term infants.

**Infant Mortality Rate by Race, Maryland, 1989-1998.**



Source: Maryland Vital Statistics, 1998 Annual Report

**Infant Mortality Rates and Healthy People 2010 Objectives by Race, Maryland, Selected Years, 1989-2010, and the U.S. 2010 Objective for All Races**



Source: Maryland Vital Statistics, 1998 Annual Report

Of the many types of birth defects the only preventable ones are neural tube defects (NTDs). Approximately 50% of pregnancies affected with NTDs may be prevented with an adequate consumption of folic acid from one month before conception through the first three months of pregnancy. This nutritional intervention requires that all pregnancies be intended and planned.

The Maryland infant mortality rates for the five-year intervals 1989-1993 and 1994-1998 show a slope of decline that may continue for all races to 2010. This figure shows rate projections for all races of 6.0 and African-American of 12.7 that can be statistically supported for 2010 if the rate of decline continues the same as in the two previous time periods. These decreases will not be as dramatic as those anticipated for the U.S. IMR. Maryland faces several challenges in sustaining a more rapid IMR decrease; the greatest of these is a better understanding of the causes of the African-American/white disparity. Also, the rate of African-Americans living in Maryland is twice U.S. average and these numbers are increasing. Maryland demographics are different from the U.S., and the U.S. IMR objective of 4.5 may be too ambitious for Maryland to achieve.

**Objective 1** - By the year 2010, the total infant mortality rate will be no more than 6.0 per 1,000 live births and 12.7 for African-Americans.

**Objective 2** - By 2010, reduce the racial disparity between white and African-American in infant mortality to no more than a ratio of 1:3.

**Objective 3** - By 2010, increase to 95% the number of pregnant women who start prenatal care in the first trimester.

**Objective 4** - By 2010, reduce the incidence of low birth rate (<2500g) to no more than 8.0% of live births.

**Objective 5** - By 2010, reduce the incidence of total preterm births to no more than 7.6%.

**Objective 6** - By 2010, reduce to no more than 2% the proportion of women of childbearing years who use tobacco.

**Objective 7** - By 2010, increase the percentage of healthy full-term infants who are put to sleep on their backs to 70%.

**Objective 8** - By 2010, increase to 100% women taking folic acid prior to conception.

**Objective 9** - By 2010, increase the percent of very low birth weight infants delivered at facilities for high risk deliveries and neonates (a Title V infrastructure building performance measure) from 86% in FY98 to 93% in FY2010.

## Action Steps

- ⇒ Discover the demographic factors leading to the increase in disparity ratio.
- ⇒ Develop an advisory coalition of organizations, citizens, community leaders, and professionals to discuss issues concerning infant mortality, including: quality of care, access to care, reimbursement of high risk care, and development of new community expectations for the content and onset of prenatal care.
- ⇒ Bring together other entities with similar health concerns, such as HIV, Sexually Transmitted Diseases, Family Planning, and Managed Care Organizations.
- ⇒ Identify data that are missing and necessary to work toward Year 2010 goals and objectives.
- ⇒ Develop/continue educational programs, such as the “Baby on Back” campaign, smoking cessation, use of Family Planning for pregnancy spacing, importance of early and regular prenatal care, substance abuse avoidance, and recognition of preterm labor signs.
- ⇒ Prevent unintended pregnancy.
- ⇒ Develop methods for providing universal preconceptional care (e.g. folic acid consumption, nutrition counseling, immunization completion, genetic screening, care for chronic and acute medical conditions/problems, and psychosocial issues including domestic violence).
- ⇒ Increase prenatal care through provider/patient education of high-risk conditions (e.g. infertility treatments, multiple gestations, and previous premature delivery).
- ⇒ Ensure universal screening and treatment of sexually transmitted diseases.
- ⇒ Decrease cigarette smoking, substance abuse, and ingestion of alcohol in women who are pregnant.
- ⇒ Expand participation in the Fetal & Infant Mortality Review process to identify and develop solutions for problems associated with the perinatal systems of care (e.g. incomplete record data, inaccurate birth certificate information, lack of transportation to health care facilities, quality of high risk care, and community knowledge deficit about pregnancy).

Partners

Center for Maternal and Child Health, DHMH • Governor’s Office for Children, Youth, and Families • Johns Hopkins University • Maryland Local Health Departments • Planned Parenthood of Maryland, Inc. • University of Maryland, Baltimore County

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Cross-Reference Table for Maternal and Infant Health

See Also

Charles County .....	188
Montgomery County .....	239
Prince George’s County .....	245



# MENTAL HEALTH

## Focus Area 1 - Development of a Statewide Comprehensive Crisis Services System

### Problem

Currently, comprehensive crisis services in Maryland are available through only a few model programs in urban or suburban jurisdictions. Consumers in need of assistance access care in a variety of ways, often waiting until the problem escalates into a visit to the hospital emergency room or in police intervention. Due to limited access to crisis services, consumers may wait until it is too late for a less costly and more effective intervention.

### Determinants

Factors that contribute to the lack of comprehensive crisis services in many jurisdictions include: 1) insufficient coordination between local law enforcement and mental health service providers; 2) lack of single 24-hour/seven-day entry points into the mental health system; and 3) fragmentation of service systems due to differences in the private and public health systems.

**Objective 1** - By 2010, develop a Statewide Comprehensive Crisis Services System, utilizing private and public resources, which is available to 100% of Maryland's jurisdictions and that promotes prevention activities and improves mental health status.

### Action Steps

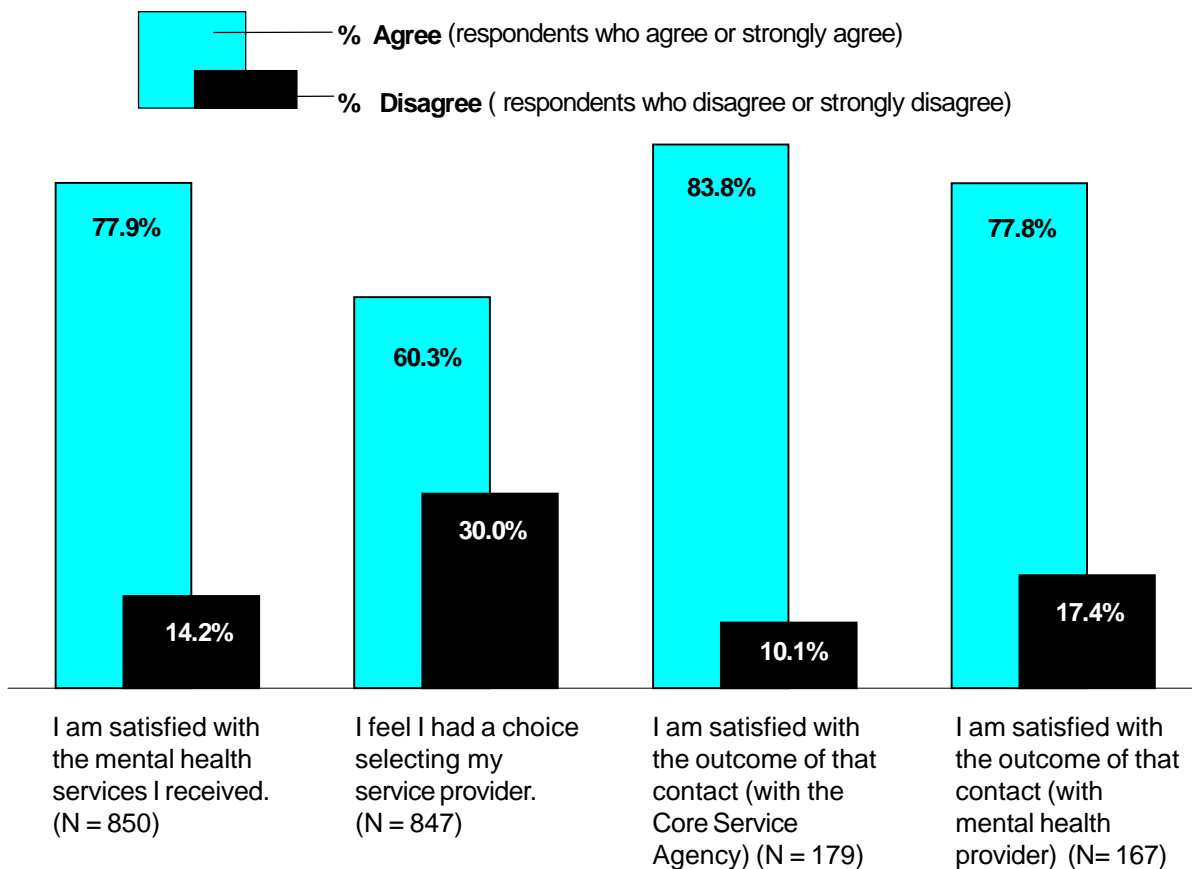
- ⇒ Develop additional resources, including comprehensive crisis services and linkages to regional programs, to address crisis service needs in Maryland.
- ⇒ Develop network of comprehensive crisis intervention services across Maryland.
- ⇒ Improve public awareness of ways and means to access crisis services.
- ⇒ Conduct needs assessment of crisis and support services developed by Maryland Core Service Agencies.
- ⇒ Monitor and utilize data from comprehensive crisis service systems and Public Mental Health System (PMHS) to manage results. Data needs include:
  - Network providers' crisis interventions;
  - Acute psychiatric admissions;
  - Diversions and/or reduced stays in jails; and
  - Suicides reported in State mortality statistics.

## Focus Area 2 - Improving the Public Mental Health System

### Problem

As the 1990s ended, approximately 75,000 individuals whose psychiatric conditions meet criteria for medically necessary services received intervention, treatment, and support services through the Public Mental Health System (PMHS). The goals of the PMHS are to improve the mental health status of consumers, help alleviate individual suffering, increase harmony in families and communities, improve work force productivity, and most appropriately utilize health care resources. Improvements to the PMHS must address implementation of best practices, increasing consumer knowledge and understanding of choices in navigating the system, and improving outcomes.

#### Adult Overall Satisfaction with PMHS and Specific Service System Components



**Source:** Report on Maryland Public Mental Health System: Consumer Satisfaction and Outcomes, 1998 Baseline Assessment

## Outcome Measures for Adult Respondents

As a direct result of all the mental health services I received...	Mean Score	St. Dev.	N	% Agree*	% Disagree
I deal more effectively with daily problems	2.217	1.059	682	72.4	15.4
I feel better about myself	2.216	1.073	693	72.5	15.7
I am better able to control my life	2.251	1.044	697	71.5	16.2
I am better able to deal with crisis	2.334	1.057	689	67.3	17.8
I am getting along better with my family	2.326	1.102	659	64.8	18.2
I do better in social situations	2.420	1.057	667	64.2	19.1

\* Numbers in the Agree column include those who agree or strongly agree with the statement. Numbers in the Disagree column include those who disagree or strongly disagree with the statement.

**Source:** Report on Maryland Public Mental Health System: Consumer Satisfaction and Outcomes, 1998 Baseline Assessment

## Determinants

- Satisfaction surveys of PMHS consumers identified user issues with choice and access to the full range of mental health providers.
- Consumers appear to lack knowledge on how to best navigate the PMHS and better manage their own health improvement.
- Maryland has a diverse statewide network of over 4,000 mental health providers delivering services to eligible individuals in over 2,000 locations. Services are delivered by providers that meet either professional licensing or administrative and program regulations and are reimbursed under a fee for service (FFS) system or funded through contracts targeted to special needs not covered by the FFS system. Core Service Agencies (CSAs), State-designated local mental health authorities, who are charged with planning and coordinating the delivery of public mental health services, help identify and promote the development of services in each of 20 defined service areas.
- Planning and development of an appropriate range of services throughout the State provides the foundation for an improved system capable of producing the desired results. Statewide efforts to identify and implement best practices for the delivery of services will contribute to improved outcomes.

- One important method in determining success in achieving improved health status is the key informant survey. Consumers can report how useful the PMHS was in meeting their needs and improving important aspects of their lives.

**Objective 1** - By 2010, increase to at least 80% the proportion of consumers of PMHS services who indicate they are well-informed and satisfied with the choice of providers and services they receive. (1998 Baseline for consumer choice: 60%.)

**Objective 2** - By 2010, increase to at least 85% the proportion of consumers who report an improvement in their mental health status and progress towards individual recovery. (1998 Baseline: Almost 75% of consumers agree that they deal more effectively with their daily problems, feel better about themselves, and are better able to control their lives.)

### Action Steps

- ⇒ Continue and revise as appropriate Public Mental Health System (PMHS) consumer satisfaction and outcome surveys.
- ⇒ Develop and implement an ongoing educational program for consumers geared towards increasing their knowledge of service availability, their rights in treatment and their ability to make choices about their treatment.
- ⇒ Develop systems and service initiatives to respond to Core Service Agency (CSA) need assessments. Data needs include:
  - Periodic survey of consumer satisfaction and health status, symptoms and functioning;
  - Periodic data on service delivery system;
  - Alternative information contributing to the assessment of improved mental health status, i.e. improvement in reported consumer employment rates; and
  - Key Informant survey.
- ⇒ Identify and implement the best service practices in Maryland.
- ⇒ Monitor data from consumer surveys to develop improvements in the effectiveness of mental health services.

### Related Reports

Maryland Mental Health Partners, & R.O.W. Sciences, Inc. (1998, 1999). *Report on Maryland Public Mental Health System: Consumer Satisfaction and Outcomes 1998 and 1999*. Report for Maryland Mental Hygiene Administration.



## **Focus Area 3 - Treating Recognized Depression**

### **Problem**

Approximately 20% of the U.S. population is affected by mental illness during a given year; no one is immune. Of all mental illnesses, depression is the most common disorder. More than 19 million adults in the United States suffer from depression. Major depression is the leading cause of disability and is the cause of more than two-thirds of suicides each year. In 1997, only 23% of adults diagnosed with depression received treatment.

### **Determinants**

- A person with depressive disorder is often unable to fulfill the daily responsibilities of being a spouse, partner, parent, employee and/or community member. The misunderstanding of mental illness and the associated stigma prevent many persons with depression from seeking professional help. Many people will be incapacitated for weeks or months because their depression goes untreated.
- Depression is treatable. Available medications and psychological treatments, alone or in combination, can help 80% of those with depression.
- With adequate treatment, future episodes of depression can be prevented or reduced in severity.
- Treatment for depression can enable people to return to satisfactory, functioning lives.
- Mental health is sometimes thought of as simply the absence of mental illness but is actually much broader. Mental health is a state of successful mental functioning, resulting in productive activities, fulfilling relationships, and the ability to adapt to change and cope with adversity. Mental health is indispensable to personal well-being, family and interpersonal relationships, and one's contribution to society.

**Objective 1** - By 2010, increase the proportion of adults with recognized depression who receive treatment.

### **Action Steps**

- ⇒ Continue and increase the Mental Hygiene Administration's (MHA's) public education campaign with special focus on depression.
- ⇒ In partnership with other organizations, target the awareness of, screening for, and treatment of depression as a special opportunity for prevention, early intervention and treatment.

- ⇒ In cooperation with Core Service Agencies (CSAs), make resources available to support access to medication to individuals with depression and apparent difficulty in affording medication.
- ⇒ Continue to monitor national data on adults with depression who received treatment (SAMHSA National Household Survey on Drug Abuse).
- ⇒ Collect data on number of individuals who received treatment through the Public Mental Health System (PMHS) who were diagnosed with depression.
- ⇒ Conduct Public Mental Health System (PMHS) follow-up study on individuals with diagnosis of major depression who were able to achieve and maintain successful outcomes.

## Partners

### *Focus Area 1 - Development of a Statewide Comprehensive Crisis Services System*

Maryland Local Advocacy Organizations • Maryland Local Core Service Agencies • Maryland Local Health Departments • Maryland Local Hospitals and Mental Health Providers • Maryland Local Police and Public Safety • Maryland Mental Hygiene Administration, DHMH

### *Focus Area 2 - Improving the Public Mental Health System*

Consumers in the PMHS • Mental Health Advocacy Organizations • Maryland Health Partners • Maryland Local Core Service Agencies • Maryland Local Health Departments • Maryland Mental Hygiene Administration, DHMH • Providers of Mental Health Services

### *Focus Area 3 - Treating Recognized Depression*

Maryland Health Partners • Maryland Local Core Service Agencies • Maryland Local Health Departments • Maryland Local Mental Health Providers • Maryland Mental Hygiene Administration, DHMH

## Cross-Reference Table for Mental Health

*See Also*

Worcester County ..... 288

# ORAL HEALTH



## Focus Area 1 - Reducing Oral Cancer Mortality

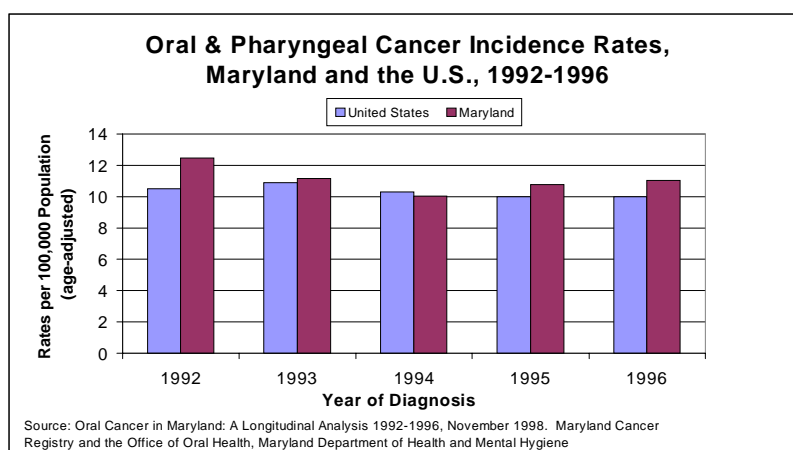
### Definition

Oral and pharyngeal cancers include the following sites: lips, oral cavity and pharynx. Rates are expressed by the incidence (number of new cases) per 100,000 population or the mortality (number of deaths) per 100,000 population.

### Problem

Oral cancer is the forgotten cancer. Each year oral cancer takes more lives than cervical cancer, Hodgkin's disease and malignant melanoma. The five-year survival rate for persons diagnosed with oral cancer is 52% – a survival rate that has not improved over the past 16 years.

From 1992 to 1996, the number of new oral cancer cases in Maryland was higher than the national rates for four out of the five years studied. Maryland ranks *seventh* among the states and the District of Columbia in mortality from oral cancer – sixth for males and females (national cancer SEER data, age-adjusted from 1992-1996).



### Determinants

Maryland's oral cancer mortality rate between 1992-1995 was 17.9% *higher* than the national rate. The use of tobacco products and alcohol are the primary risk factors contributing to oral cancer. Other causes of oral cancer include lack of fruit and vegetables, iron deficiency anemia, DNA viruses, and exposure to ultraviolet rays. Approximately 75% of oral cancer cases in the U.S. can be attributed to tobacco use. In Maryland, a longitudinal case study from 1992-1996 found that 81% of reviewed cases used tobacco and 51.5% were using tobacco at the time of diagnosis. These figures are substantially higher than the 1994 estimated smoking prevalence of 20.1% among Maryland adults.

Possible reasons for Maryland's high mortality rates of oral cancer are 1) lack of early detection; 2) lack of access to healthcare; 3) high levels of both chewing and smoking tobacco use; and 4) genetic predisposition.

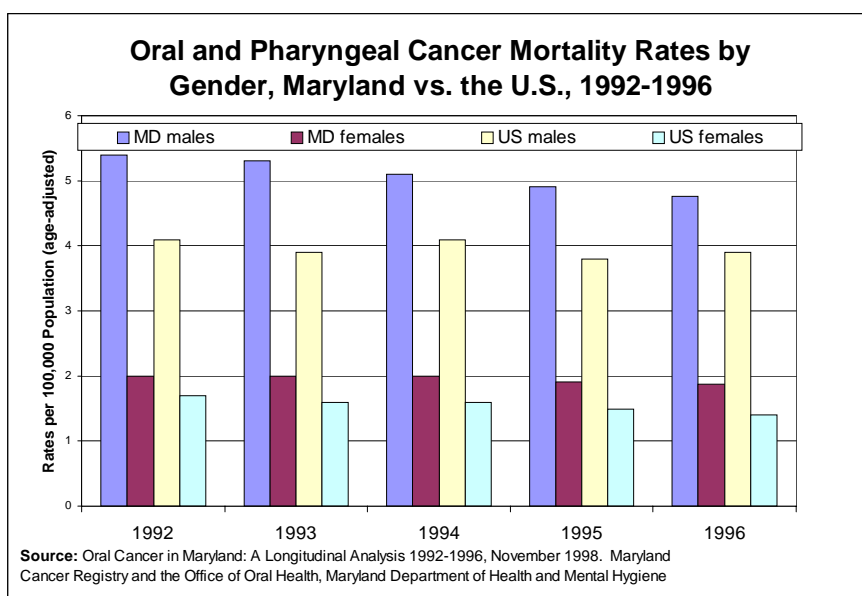
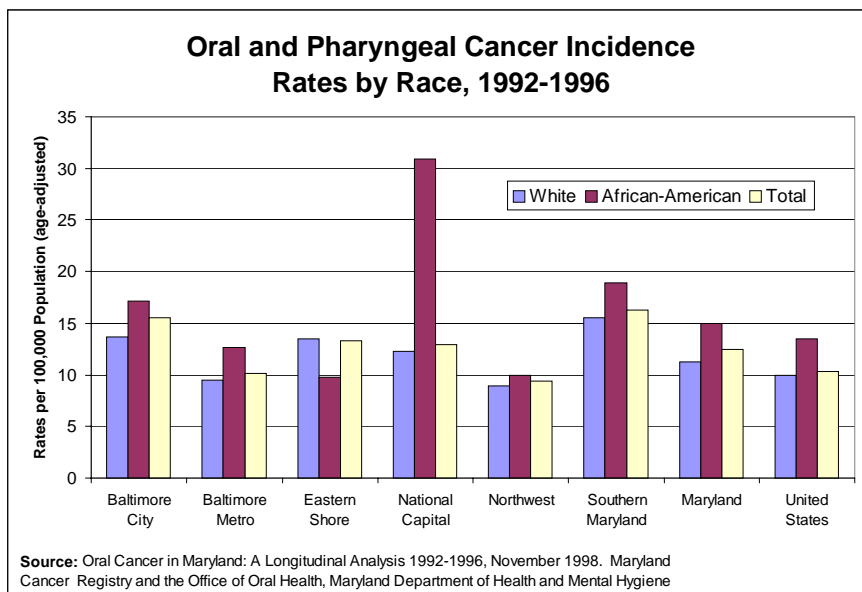
## Oral Cancer and Health Disparities

In the United States and in Maryland, African-Americans have higher incidence and mortality rates than whites. African-American men have the highest incidence of oral cancer and suffer the lowest survival rates of any other racial or ethnic group. This disparity likely exists because of limited access to treatment, and limited knowledge of oral cancer and the importance of early detection and screening.

Nationally, among African-Americans, oral cancer is the fourth most common cancer and the seventh leading cause of cancer death in African-American men. Only 34% of African-Americans diagnosed with oral cancer survive five or more years, compared with 55% of whites.

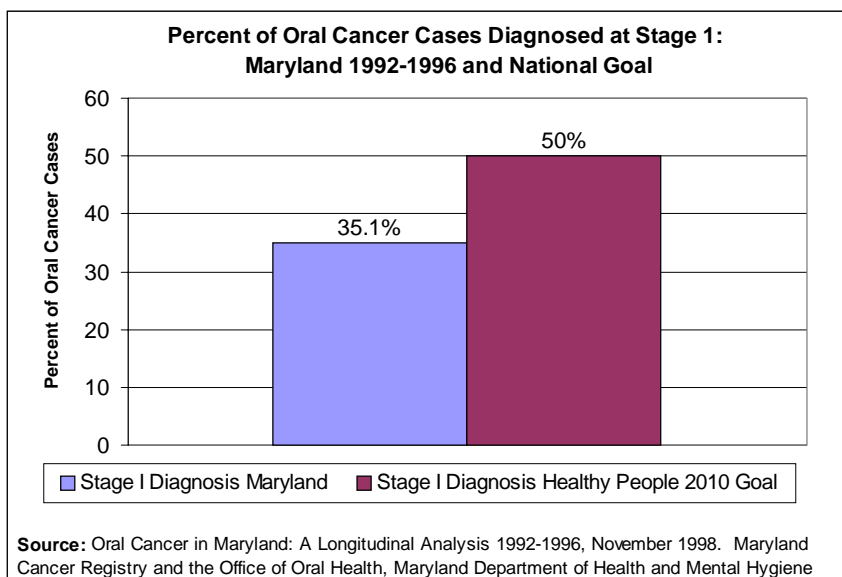
Nationally, African-Americans are diagnosed with oral cancer 10 years earlier than in the general population where the disease is normally diagnosed between the ages of 65 and 74. Maryland follows this national trend with the median age at diagnosis among whites being 65 and among African-Americans 57. Whites represent 72% of oral and pharyngeal cancer cases in Maryland, African-Americans represent 24% of cases, and 4.2% are other races. While African-Americans represent only 24% of the total Maryland cases, they are disproportionately represented among the number of patients with advanced disease, a trend that is also observed nationally.

Analysis of 1992-1996 oral cancer registry data revealed that Baltimore City had a statistically higher incidence rate than national data. Oral cancer mortality rates among African-American men in Baltimore City and Prince George's County were also significantly higher than the national average.



From 1992-1996, 585 Maryland residents died of oral and pharyngeal cancer. The figure on the previous page shows that for these five years Maryland men and women had higher mortality rates than the national rates.

Oral cancer is also associated with low socio-economic status, urban residence and social instability – all factors highly correlated to tobacco and alcohol use and poor health care. In Maryland and elsewhere, those at highest risk of oral cancers are generally not covered by private or public health insurance aimed at ensuring an annual oral cancer exam.



The decline in risk of oral cancer following the cessation of smoking or chewing tobacco, at any stage of disease and irrespective of the number of years of using tobacco, is rapidly providing evidence of the importance of quitting.

**Objective 1** - By 2010, increase to at least 50% the proportion of oropharyngeal cancer lesions detected at Stage I (localized). (Baseline: 35.1%, detected at Stage I)

**Objective 2** - By 2010, increase to at least 50% the number of adults, aged 40 years and older, who, in the past year, reported having had an oropharyngeal cancer examination. (Baseline: 20%, from 1995 data collected in Maryland by the National Institute of Dental and Craniofacial Research)

### Action Steps

- ⇒ Implement an educational campaign for dental and medical providers in Maryland so that they are knowledgeable about oral cancer risk behaviors and populations and understand the importance of and feel confident conducting an oral cancer exam.
- ⇒ Increase the number of dental providers accepting Medicaid patients.
- ⇒ Implement an oral cancer campaign encouraging individuals at risk to be screened for oral cancer.

## Partners

Center for Cancer Control and Surveillance, DHMH • Managed Care Organizations • Maryland Chapter of the American Cancer Society • Maryland Dental Hygienist's Association • Maryland Dental Society • Maryland Local Health Departments • Maryland Medicaid • Maryland State Dental Association • National Institute for Dental and Craniofacial Research • Office of Oral Health, DHMH • University of Maryland Dental School

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## Focus Area 2 - Preventing Oral Disease in Children

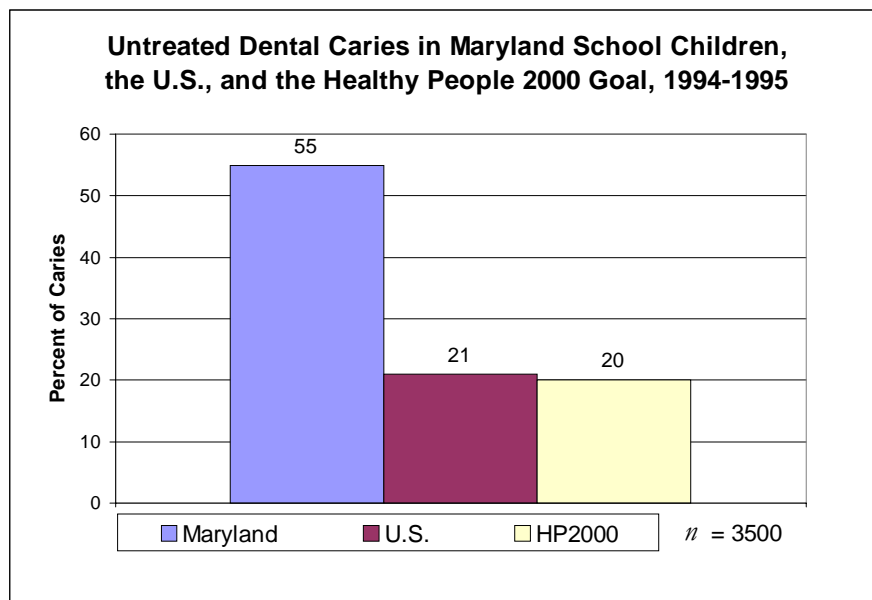
### Definition

Oral disease in children includes tooth decay, periodontal (gum) disease, broken teeth and jaws, other conditions from abuse or accidents, and developmental diseases, including cleft lip and cleft palate. In millions of children, these untreated dental conditions cause unnecessary pain and swelling making it difficult to eat or speak and possibly contribute to a failure to thrive. Their appearance may cause embarrassment and diminished self-esteem. Children who have decay in their primary (baby) teeth are more likely to develop decay in their permanent teeth. New research indicates that decay in adult teeth may lead to cardiac and obstetric complications.

### Problem

Preventable oral disease afflicts the majority of American children. In the United States 25% of children and adolescents experience 80% of all dental decay. Children whose families have low incomes, are in minority groups, have minimal exposure to fluoride, have special health needs, or come from less educated or poorer families are at greatest risk for oral disease. In 1995, fewer than one in five children in the United States who were eligible for dental services under Medicaid/ Early and Periodic Screening, Diagnostic and Treatment (EPSDT) program received a preventive dental service.

National studies reveal that individuals with the greatest need for oral health services are those least likely to have dental insurance or the personal resources to purchase dental care. A 1996 study of the U.S. Medicaid population found that 2% of children, ages five years and under, used 35% of all resources spent on dental care. These high costs were mostly for treating severe cases of early childhood caries (baby bottle tooth decay) in a hospital setting – a fundamentally preventable oral disease.



**Source:** Survey of Oral Health Status of MD School Children, 1995. Dept. of Pediatric Dentistry, University of Maryland at Baltimore, Dental School and the Office of Child Health, Maryland Department of Health and Mental Hygiene. School Children in grades K,3,6,9,12.

## Determinants

The oral health status of children in Maryland mirrors that of the nation. In 1993, only 14.2% of Medicaid eligible children in Maryland received EPSDT preventive dental services.

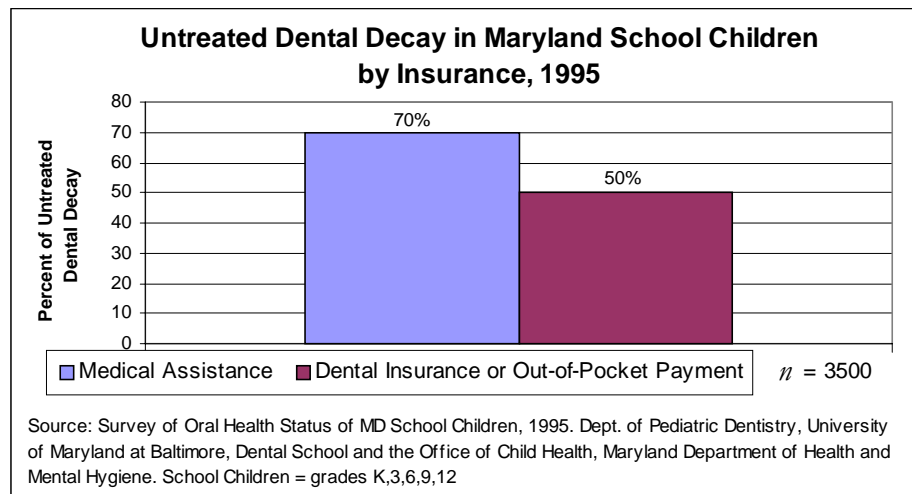
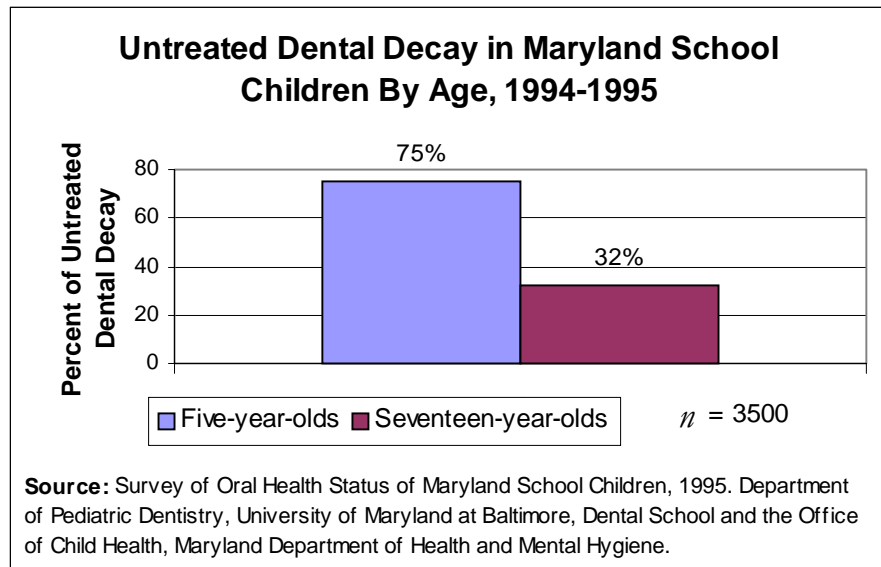
The Survey of the Oral Health Status of Maryland School Children, 1994-1995 found nearly three times the U.S. average in untreated tooth decay. Seventy-five percent of this untreated decay was found in five year olds versus 32% of untreated decay found in 17-year-olds. This same study revealed that 50% of Maryland kindergarten children had decay and those children who were eligible for Medicaid or free/reduced school lunch programs had 30% more decayed teeth. Children living in areas without fluoridated water had 50% more decayed teeth than children living in areas with fluoridated water.

Dental caries (cavities) are the most common oral disease in children. This infectious disease starts before the eruption of the first tooth and continues through one's life. Dental caries have a strong link to poor feeding practices, nutrition, and oral hygiene.

## Disparity in Access to Quality Oral Health Care

For children receiving Medicaid, access to dental care is difficult. The 1994 – 1995 Survey of the Oral Health Status of Maryland School Children found only 33% of Medicaid-eligible children visited a dentist every six months compared to the State average of 48% of children who saw a dentist every six months. Children who received Medicaid had 70%

untreated decay versus 50% of untreated decay in children who had private health insurance or paid out of pocket. The results of this study also showed that 75% of decay was in 25% of the children and, even more startling, that 15% of the children had 50% of the decay.





Western Maryland suffered the most with having both the highest number of cavities per child and the highest percentage of children with cavities. The Eastern Shore was the second most affected area in Maryland having the same oral health problems. The oral disease that exists in these two areas of the State is mostly due to a lack of access to dental professionals and lack of community water fluoridation.

**Objective 1 -** By 2010, increase dental reimbursement rates to help meet the dental services utilization goals established in 1998 by Senate Bill 590.

**Objective 2 -** By 2010, increase the number of children with sealants by 20%. (The baseline number will be taken from the 2000-2001 Oral Health Survey of Maryland School Children that will be conducted by the University of Maryland, Dental School.)

**Objective 3 -** By 2010, reduce untreated cavities in the primary and permanent teeth by 20%. (The baseline number will be taken from the 2000-2001 Oral Health Survey of Maryland School Children that will be conducted by the University of Maryland, Dental School.)

### **Action Steps**

- ⇒ Increase provider participation in Medicaid by increasing reimbursement rates.
- ⇒ Organize partners to help develop a mechanism to increase public awareness about the importance of oral health particularly in underserved and high-risk populations.
- ⇒ Increase the number of effective school-based or school-linked sealant programs for targeted high-risk children.
- ⇒ Link with current School Based Health Centers to provide preventive oral health services and referrals to dental providers.
- ⇒ Increase the number of public facilities able to provide oral health services to individuals in need.
- ⇒ Improve oral disease surveillance by sampling four counties every other year and every fifth year by conducting a statewide survey.
- ⇒ Develop and promote oral health initiatives through established programs such as the Maryland State Women, Infant, and Children (WIC) Program, Head Start, Maryland State Office of Child Health, etc.

# Partners

Advocates for Children and Youth • Centers for Disease Control and Prevention • Head Start • Managed Care Organizations participating in HealthChoice • Maryland Academy of Pediatric Dentistry • Maryland Dental Hygienist's Association • Maryland Dental Society • Maryland Local Health Departments • Maryland Medicaid • Maryland Office of Children, Youth and Families • Maryland State Women, Infant, and Children (WIC) Program, DHMH • Maryland State Dental Association • National Institute for Dental and Craniofacial Research • Office of Child Health, DHMH • Office of Oral Health, DHMH • University of Maryland Dental School

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**Cross-Reference Table for Oral Health**

See Also

Allegany County .....	144
Carroll County .....	172
Frederick County .....	202
Garrett County .....	207
St. Mary's County .....	261

# PUBLIC HEALTH INFRASTRUCTURE



## Focus Area 1 - Improving Access to Health Data

### Problem

The introduction of desktop computing, telecommunication networks, and the Internet are influencing the manner in which public and private health practitioners collect, access, and use data. The improvements in technologies result in the collection of more data that can be valuable for all health professionals, both public and private, if the data are accessible. Previously, data timeliness was limited by the lack of effective automation and the lack of effective telecommunications. The Department of Health and Mental Hygiene is expanding its Wide Area Network (WAN) throughout the state to each county to provide greater access to available information for all health professionals. In addition to the expansion of telecommunications capability, new methods for identifying sources of data, integrating data when appropriate, and ways for improving the timeliness and integrity of data are also needed. Training in data interpretation and use must be readily available to relevant staff.



### Scope of the problem

The WAN in the Department of Health and Mental Hygiene (DHMH) includes a firewall to connect the Department's private secured WAN to the Internet for communications with most public and private health and medical organizations. At the end of 2000, all except three of 24 counties had at least one building connected to the Department's WAN. Also, there were approximately 90 sites that were not connected to the Department's WAN, in which public health staff are located. This leaves many health professionals without adequate means to access essential health data needed to make timely informed decisions.

Over the past decade, a number of automated data systems were developed, primarily using legacy mainframe technology. Although most public health staff have access to the mainframe computer and to the various existing data systems, no effective means exist to integrate the data from multiple systems. Most of the systems were developed independently, resulting in the lack of data standards, duplicative data, redundant processes, and, generally, an overall ineffective environment for making the most effective use of existing information. Many of the old data systems should be replaced or combined where appropriate. Data standards will be necessary in order to integrate data across systems. New access and reporting methods, including geographic information systems (GIS) should be introduced to help provide a more effective environment for analysis of multiple data sets.

A more effective educational program for health professionals is needed throughout the State and for local health organizations. Limited training and educational opportunities in the rural areas of the State are educational impediments for health professionals. Continuing education is a requirement for many health professionals, but the distance between their working location and the institutions that provide the necessary training and education creates an enormous burden. Many training and educational opportunities can be expanded through distance education technologies, such as the Internet, compressed video teleconferencing, and satellite broadcast.

Resources are the primary obstacles. In the future, additional equipment and software will be required for connecting all staff to the DHMH WAN and for the processing and storage of data. New data systems should be developed, which will require the assistance of contracted systems development staff. An extensive training program will be needed to ensure that all employees make the most effective use of new technologies for access and use of the new data systems. Existing budgets do not include sufficient funds to attain all the desired goals. Future budgets may also be insufficient. Consequently, other sources of funds should be identified.

**Objective 1** - By 2005, all DHMH public health staff at headquarters and in local health departments will have direct access to public health information via the DHMH WAN and the Internet.

### **Action Steps**

- ⇒ Develop an action plan that identifies the components for full connectivity for all headquarters and local health department professional staff.
- ⇒ Identify sources of funding needed to provide full connectivity throughout the Department.
- ⇒ Acquire and install necessary, dedicated telecommunications lines, equipment and software. Hire additional support staff.
- ⇒ Train all professional staff in the use of the Internet and other new telecommunications capabilities.

**Objective 2** - By 2005, the Department of Health and Mental Hygiene will take advantage of the growing use of electronic information technology to enable State and local health department staff to accomplish their mission.

### **Action Steps**

- ⇒ Promote the value of electronic public health information.

- ⇒ Promote education in the use of methods to protect privacy and confidentiality of electronic information.
- ⇒ Implement security technologies necessary for the protection of public health data.
- ⇒ Convene a data standards user group to develop data standards and parameters for presentation of data online.
- ⇒ Investigate new technologies for improving the timeliness, accuracy, and accessibility of public health information. Develop pilot projects using new technologies.

**Objective 3 -** By 2003, complete the establishment of the first phase of the effort begun under the Public Health Data Network (PHDN) initiative for building an integrated data system in Maryland.

### **Action Steps**

- ⇒ Complete the development of the Public Health Data Network (PHDN) core system.
- ⇒ Continue the effort of the PHDN Task Force to identify additional data requirements for inclusion in the data warehouse.
- ⇒ Develop processes to assure and improve timeliness and availability of data.
- ⇒ Supplement on-line access with timely production and dissemination of printed reports of data in similar format.
- ⇒ Augment the system to include a capability to automatically extract data for presentation on the Department's Internet Web pages.
- ⇒ Support collaboration of the Office of Public Health Assessment, in CPHA, with other state agencies to establish an integrated Web-based information system.
- ⇒ Construct Web-based access to information such as vital statistics, hospital discharge data and Behavioral Risk Factor Surveillance.
- ⇒ Establish a formal training program for users of the data warehouse capabilities.

**Objective 4 -** By 2005, develop a centralized geographic information system (GIS) capability within DHMH headquarters.

### **Action Steps**

- ⇒ Identify technical components for a GIS.
- ⇒ Ensure that necessary standardized geographic identifiers are embedded in all data systems.
- ⇒ Provide training to technical staff in the use of the GIS technology.
- ⇒ Acquire necessary software.
- ⇒ Build processes to extract data from data systems for presentation via the Intranet and Internet.

**Objective 5 -** By 2005, expand the existence and use of distance learning technology, including a combination of compressed video teleconferencing systems, satellite receivers, and Internet-based education programs, at State and local health departments.

### **Action Steps**

- ⇒ Determine the existing distance learning resources available at DHMH headquarters and all local health departments and clinics.
- ⇒ Ensure that at least 50% of all local health departments have at least one dedicated room with standardized distance learning equipment.
- ⇒ Initiate negotiations with the University of Maryland, University College, to promote the development of Internet-based professional educational programs.
- ⇒ Identify new sources of funding for acquiring additional satellite dishes and compressed video teleconferencing equipment.
- ⇒ Work with community colleges, other State agencies, and county governments to identify existing distance learning equipment available for use by public health professionals.

**Objective 6 -** By 2005, develop minimal standards for analytic capacity required for State and local health departments.

### **Action Steps**

- ⇒ Identify existing analytic knowledge and expertise among LHD staff.
- ⇒ Develop standards for epidemiological and biostatistical capacity at the local and State level.
- ⇒ Identify methods to obtain necessary technical support to provide core analytic capabilities:
  - ❖ Hire new staff;
  - ❖ Train current staff; and
  - ❖ Develop framework for sharing epidemiological and biostatistical support among contiguous counties.

**Objective 7 -** By 2005, increase training options in computer information technology, biostatistics, and epidemiology for health professionals at State and local agencies.

### **Action Steps**

- ⇒ Convene a committee to identify and document continuing education needs for public health professionals.
- ⇒ Establish formal associations with relevant local academic institutions for training options.
- ⇒ Provide field placement options in local and State health facilities with appropriate supervision for practical experience.
- ⇒ Establish a formal distance learning educational program for public health professionals throughout the State.

## Focus Area 2 - Ensuring an Adequate Public Health Workforce

### Definition

The Public Health Functions Steering Committee, established by the Public Health Service's Office of Disease Prevention and Health Promotion, defines the public health workforce as "all those providing essential public health services, regardless of the nature of the employing agency." The Committee also noted that provision of these essential services requires collaboration among an array of public and private partners. The *Public Health in America* statement includes a list of the essential public health services:

### Public Health in America

**Vision:** Healthy People in Healthy Communities

**Mission:** Promote Physical and Mental Health and Prevent Disease, Injury, and Disability

#### Public Health

- Prevents epidemics and the spread of disease
- Protects against environmental hazards
- Prevents injuries
- Promotes and encourages healthy behaviors
- Responds to disasters and assists communities in recovery
- Assures the quality and accessibility of health services

#### Essential Public Health Services

- Monitor health status to identify community health problems
- Diagnose and investigate health problems and health hazards in the community
- Inform, educate, and empower people about health issues
- Mobilize community partnerships to identify and solve health problems
- Develop policies and plans that support individual and community health efforts
- Enforce laws and regulations that protect health and ensure safety
- Link people to needed personal health services and assure the provision of health care when otherwise unavailable
- Assure a competent public health and personal health care workforce
- Evaluate effectiveness, accessibility, and quality of personal and population-based health services
- Research for new insights and innovative solutions to health problems

**Source:** Public Health Function Steering Committee. *Public Health in America*, Fall 1994.  
Available: <http://www.health.gov/phfunctions/public.htm> (January 1, 2000).



## Problem

The public health workforce will play a critical role in achieving the vision of “healthy people in healthy communities.” An adequate supply of competently prepared health professionals is needed to address a growing array of complex challenges to the public’s health. Maryland currently lacks a comprehensive plan to assure an adequate statewide supply of needed professionals in public health agencies responsible for the roles encompassed in the *Public Health in America* statement.

## Determinants

The work of promoting and protecting the public’s health is carried out by health care and other professionals in a variety of organizational settings. The principal public health agencies in Maryland are the state and local health departments. Other public agencies, including agriculture, environment, and education, also participate in this work. Additionally, a growing number of private sector entities are involved; among these are managed care organizations, hospitals, nonprofit corporations, schools, faith organizations, and many businesses. Some of the principal classifications of health workers currently being monitored by the federal government are listed in the chart below. This list does not include every occupational title and category of health professional used in all public health settings. Assuring an appropriately trained and adequate supply of these and other needed health professionals for Maryland will require an approach that incorporates delineation of the workforce composition, competency enhancement, and promoting the education/training infrastructure.

### Selected Health and Related Professional Occupations included in the Standard Occupational Classification (SOC) System

Clinical Counseling & School Psychologist	Medical & Public Health Social Worker
Dental Hygienist	Mental Health Counselor
Dentist	Mental Health & Substance Abuse Social Worker
Dietician & Nutritionist	Occupational Health & Safety Specialist
Emergency Management Specialist	Occupational Health & Safety Technician
Environmental Engineering Technician	Pharmacist
Environmental Engineer	Physician
Environmental Scientist	Registered Nurse
Environmental Science Technician	Secondary Health Specialist Teacher
Epidemiologist	Social & Community Service Manager
Health Diagnosing and Treating Practitioner	Substance Abuse & Behavior Disorder Counselor
Health Educator	Veterinarian
Health Technologist/Technician	
Life, Physician, and Social Scientist/Technician	
Medical & Health Services Manager	

**Source:** Office of Management and Budget. 1998 Standard Occupational Classification. *Federal Register*, September 30, 1999.

## **Workforce composition**

The number, distribution, and disciplines of public health workers required varies across settings depending on community need, legal requirements, and available financial and other resources. Workforce plans can help to determine the capacity of needed professionals and skills required to address identified needs. Historically, assessment of need/demand for physicians has been the primary focus of workforce requirement analysis. One example is a methodology developed by the Public Health Service that is used to determine adequacy of physician supplies in areas proposed for designation as Health Professional Shortage Areas (HPSAs). Similar methodologies assess adequacy for several other health professionals including dentists, psychiatrists, veterinarians, and ophthalmologists. Although these methodologies have been in place for a number of years, there is a growing recognition of their limitations, such as adjustments for subspecialties within a particular professional classification. The federal government, through the Public Health Service's Bureau of Health Professions, is improving methods to assess adequacy and project requirements for a variety of health care professionals, including allied health and public health workers.

These efforts are being done in coordination with a number of states around the country. Use of a standardized taxonomy to categorize and classify public health personnel will support these collaborative efforts. The Standard Occupational Classification (SOC) System, used by all federal agencies that collect occupational data, includes a broad (but not exhaustive) array of public health professionals. Voluntary adoption and use of the SOC System to enable data collection at more detailed levels is recommended in the Healthy People 2010 chapter on public health infrastructure for state and local, public and private sector employers, and other organizations.

Comprehensive planning for workforce needs--in the overall Maryland health care system or within the state and local public health agency subset--requires accurate data to delineate the size and distribution of existing supplies. In Maryland, mechanisms have been developed to collect data suitable for workforce monitoring, in coordination with the licensure process for at least two categories of health professionals, physicians and nurses. Development of similar mechanisms for data collection of other categories of health professionals would provide a useful basis for monitoring these professionals. Profiles of each category of health professional monitored could be compiled. Analysis of these profiles could be used to inform workforce needs assessment, policy decisions, and other aspects of overall comprehensive workforce planning. Assessment of skills needed for a particular occupational setting is an additional required dimension of effective workforce monitoring.

## **Competency Enhancement**

A variety of skills are needed to implement the essential public health functions outlined in the *Public Health in America* statement. These functions include: monitoring health status; informing, educating, and empowering people; mobilizing community partnerships; developing policies and plans; enforcing laws and regulations; linking people to needed services; conducting evaluations; and conducting research. To carry out these responsibilities, public health workers must have a basic knowledge of public health and related expertise. Additionally, in order to

effectively respond to the increasing, myriad changes in the health care marketplace and multifactorial health problems, public health workers must also be competent in a growing number of cross-cutting technical skills and abilities. Effective program planning, service delivery, and evaluation require skills in specialties such as biostatistics, epidemiology, informatics, and environmental health, as well as the social and behavioral sciences. To effectively identify and address disparities and diversity among population subgroups -- ethnic, cultural, and demographic -- today's public health workforce must also possess an appropriate level of cultural and linguistic competencies.

## **Education and training infrastructure**

Maryland is fortunate to have a number of institutions of higher learning -- including graduate schools of public health, colleges, and universities -- in locations around the State with established programs in areas of needed expertise. A systematic effort to support skills development and renewal, beyond those required by the relevant, discipline-specific licensure/certification process, for public health professionals could be developed in coordination with these institutions. Expansions in technology are yielding mechanisms, including video-conferencing and Internet based distance teaching, that increase the options for convenient and on-the-job training closer to the work-site. These options hold great promise for reducing costs and improving access to needed, continuing education and desirable skill building opportunities.

**Objective 1 - Workforce Composition:** By 2010, establish the capacity to monitor and plan for statewide need of a minimum set of public health worker classifications in the Department of Health and Mental Hygiene. (Baseline 2000: monitoring and planning capacity for zero classifications)

### **Action Steps**

- ⇒ Convene an advisory committee, with broad representation among public and private stakeholders, to oversee comprehensive public health workforce monitoring, including:
  - ❖ Designation of a division within the DHMH central office programs to assume responsibility for public health workforce monitoring and planning;
  - ❖ Assurance of adequate funding for DHMH central office capacity needed to begin comprehensive and systematic monitoring of Maryland's public health workforce requirements;
  - ❖ Promotion of collaboration of efforts to develop data collection for workforce monitoring in coordination with existing licensure processes for health professionals on a prioritized basis; and
  - ❖ Development of a methodology to assess need for selected categories of health professionals on a prioritized basis.

**Objective 2 - Workforce Competency:** By 2010, establish standards in the Department of Health and Mental Hygiene (DHMH) for certification of a minimum set of public health worker classifications used in state and local health departments. (Baseline 2000: standards for 0 classifications)

### **Action Steps**

- ⇒ The Workforce Advisory Committee will coordinate efforts to:
  - ❖ Identify the core competencies needed to assure effective delivery of public health services in the state and local health departments;
  - ❖ Develop criteria to assess the competency adequacy among the categories of public health workers in state and local health departments; and
  - ❖ Coordinate collaborations with relevant public and private stakeholders.

**Objective 3 - Workforce Education and Training:** By 2010, the Workforce Advisory Committee should oversee development of a mechanism to assure ongoing capacity of public health skills training for at least 25 percent of a targeted set of public health workforce deployed in local health departments. (Baseline 2000: developmental)

### **Action Steps**

- ⇒ Assess the availability of ongoing public health skills training in local health departments.
- ⇒ Identify innovative options to provide convenient (locally-based) and affordable professional development opportunities, including continuing education, around the state.
- ⇒ Identify funding resources for expansions in options for professional education programs.
- ⇒ Promote collaboration of higher education institutions (including community colleges) with local communities to address needed public health workforce development options.
- ⇒ Increase options for workshops, public health grand rounds, seminars, and other in-service training options for practicing public health professionals, using distance learning technologies and formats.
- ⇒ Continue and expand internship and other field training options in the state and local health departments.

Partners

Information Resources Management Administration, DHMH • Maryland Association of County Health Officers • Maryland Department of Budget Management, Personnel Division • Maryland Department of Health and Mental Hygiene (DHMH) • Maryland Local Health Departments • Maryland Public Health Association • Office of Health Policy, DHMH • Office of Public Health Assessment, DHMH

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Cross-Reference Table for Public Health Infrastructure

See Also

Harford County .....	211
Prince George’s County .....	245

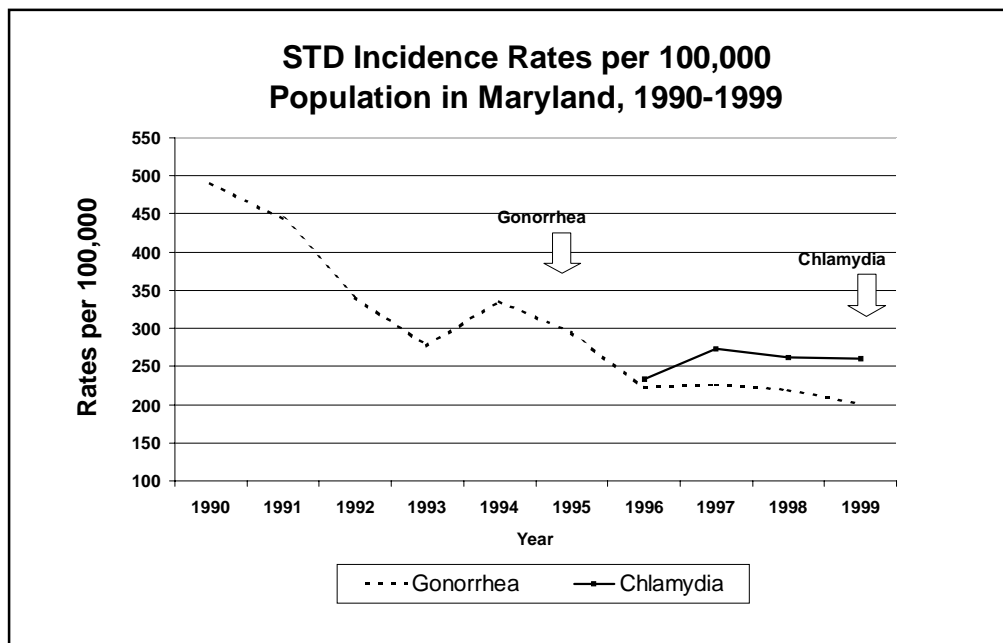


# PREVENTING SEXUALLY TRANSMITTED DISEASES

## Problem

Sexually transmitted diseases (STDs) are among the most widespread, least detected, and costly infectious diseases reported throughout the world today. Of the top 10 most frequently identified cases of infectious diseases reported to the CDC, five are STDs. Despite the burdens, costs, complications, and preventable nature of STDs, they remain a significant public health problem, largely unrecognized by the American public, policymakers, and public health and health care professionals. STDs cause many harmful, often irreversible, and costly clinical complications such as reproductive health problems, fetal and perinatal health problems, congenital birth defects, fetal deaths, and cancer. In addition, studies of the worldwide Human Immunodeficiency Virus (HIV) pandemic link other STDs to a causal chain of events in the sexual transmission of HIV infection.

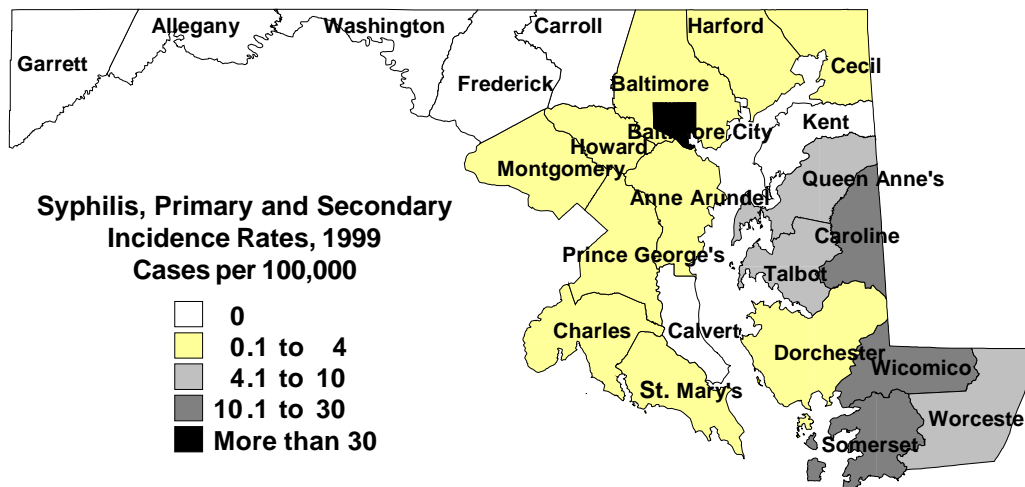
Although Maryland experienced downward trends in the case numbers and rates of STDs in the beginning of the 1990s, there have always been existing differences among those groups in the population most infected with the diseases. Clearly, women, adolescents, minorities, and African-Americans disproportionately suffer the most.



**Source:** Maryland DHMH Center for Community Epidemiology, 2000

However, in 1997 Maryland's rate of infectious syphilis (17.4 cases per 100,000 with 71 cases of congenital syphilis) was the highest in the nation. Seventy-five percent of the State's infectious syphilis cases were in Baltimore City. Then, through major collaborative efforts among Department of Health and Mental Hygiene (DHMH), the Baltimore City and local county health departments, the Maryland Department of Public Safety and Corrections, community-based organizations and the Centers for Disease Control (CDC), the Maryland rates for infectious syphilis in 1999 declined to 6.6 per 100,000 and congenital syphilis declined to 27 cases per 100,000. Despite these all out efforts, there still remains much to do if Maryland is to bring its rates for infectious syphilis in line with the CDC's national goal of 0.4 per 100,000 in 2010.

### Primary and Secondary Syphilis in Maryland, 1999



Source: Maryland and DHMH Center for Community Epidemiology, 1999.

Since 1990, reported cases of gonorrhea have declined 52%. Baltimore City accounts for 62% of reported cases, with a 4% increase in 1998. Other high-prevalence areas for gonorrhea include Dorchester, Wicomico, and Prince George's counties. Eighty-one percent of gonorrhea is reported in the 15- to 34-year-old age group. Despite declining rates, in 1998, Maryland's rate of 219 per 100,000 was almost double the national rate of 121 per 100,000.

*Chlamydia trachomatis* became a reportable condition by laboratories in October 1994. Since 1996, cases of *Chlamydia trachomatis* have steadily declined; however, this disease continues to be the most frequently identified STD in Maryland. In 1998, there were 13,450 case reports. Eighty-five percent of cases were among women in the 15 to 29 age group. This is a fact most attributable to the routine screening of women in this age group. High-prevalence areas reporting more than 300 cases per 100,000 continue to be in Baltimore City, and Somerset, Wicomico, Worcester, Dorchester, and Prince George's counties.

Viral STDs such as Hepatitis B (HBV), the only vaccine preventable STD, and Human Papilloma Virus (HPV) are STD diseases whose consequences may result in serious life-threatening disease, including cancer. Hepatitis B can cause chronic, and often unrecognized infection, including infections among maternal patients, and complications leading to liver cancer, and liver failure. One percent of those infected may die from acute disease. Although the Vaccines for Children Program provides HBV vaccines for children up to their 19<sup>th</sup> birthday, it is the 19- to 25-year-olds who are at highest risk for sexually transmitted HBV infection. Infection with HPV has been linked to the subsequent development of cervical cancer. Major public health initiatives to reduce and/or eliminate these diseases in the population are lacking and are therefore deserving of public health initiatives in the Healthy People 2010 campaign.

## Determinants

There are many complex major determinants that contribute to the prevalence of STDs in society. These include:

1. Biological factors such as unprotected sex, the often asymptomatic nature of STDs, the lag time between infection and the onset of disease and complications, and the greater susceptibility of infection among women, adolescents, and young adults.
2. Lack of access to health care, defined as lack of access to publicly supported STD clinics, having no medical coverage, having coverage that imposes a copayment or deductible, or having coverage that excludes the basic preventive health services that help avert STDs and their complications.
3. Many behavioral and social factors place individuals in “at risk” situations. The primary behavioral factor is a lack of personal responsibility leading to participation in “at risk” behaviors that can contribute to infection. These include unprotected sex, substance abuse, sexual coercion, domestic violence, sex work, and cultural attitudes toward sexual activities.

STDs disproportionately affect disenfranchised persons and persons who are in social networks in which high-risk sexual behavior is common and either access to care or health seeking behavior is compromised. Some disproportionately affected groups include adolescents, those living in poverty, immigrant workers, people in detention centers and sex workers (people who exchange sex for money, drugs, or other goods).

Perhaps the most important social factor contributing to the spread of STDs in the U.S., and the factor that most significantly separates the U.S. from those industrialized countries with low rates of STDs, is the stigma associated with STDs and Americans’ general discomfort with discussing intimate aspects of life, especially those related to sex. In addition, sex and sexuality pervade many aspects of the nation’s culture, and people in the U.S. are fascinated with sexual matters. Paradoxically, while sexuality is considered a normal aspect of human functioning, Americans, nevertheless, are secretive and private about their sexual behavior. This secrecy surrounding sexuality impedes sexuality education programs for adolescents, open discussion between parents and their children and between sex partners, balanced messages from mass media, education and counseling activities of health care professionals, and community activism regarding STDs.



## High-Risk Sub-Populations

Although any Maryland resident who participates in risky sexual behaviors could contract a STD, there are certain sub-populations within Maryland that are more at risk for infection than others. The three major subpopulations in Maryland are:

- **Women:** Women are more susceptible to STDs than men. Among the most serious STD complications are pelvic inflammatory disease, ectopic pregnancy, infertility, cervical cancer and chronic pelvic pain as well as complications during pregnancy that can cause serious illness or death to the fetus or newborn. Women are biologically more susceptible to STD due to the anatomic nature of their reproductive tract which in turn can contribute to a delay in diagnosis and treatment of infection.
- **Adolescents:** For a variety of behavioral, social, and biological reasons, STDs disproportionately affect adolescents and young adults. Adolescent girls have a higher risk for infection than older women partly because the cervix of adolescent females is covered with cells that are especially susceptible to STDs, such as chlamydia. In addition, sexually active teenagers often are reluctant to obtain STD services, or may face serious obstacles when trying to obtain them. Similarly, health care providers often are uncomfortable discussing sexuality and risk reduction with their patients, thus missing opportunities to counsel and screen young people for STDs.
- **African-American and Hispanic populations:** Race and ethnicity in the U.S. are risk markers that correlate with other fundamental determinants of health status, such as poverty, limited or no access to quality health care, fewer attempts to get medical treatment, substance abuse, and living in communities with a high number of cases of STDs.

**Objective 1** - Reduce the rate of gonorrhea from 202.7 per 100,000 in 1999 to no more than 19 per 100,000 in 2010.

**Objective 2** - Reduce the rate of syphilis from 6.7 per 100,000 in 1999 to no more than 0.4 per 100,000 in 2010.

**Objective 3** - Prevent the rate of chlamydia of 263.8 per 100,000 in 1999 from rising above 300 per 100,000 in 2010.

**Objective 4** - Reduce the cases of congenital syphilis from 26 per 100,000 in 1999 to zero in 2010.

**Objective 5** - Develop baselines consistent with CDC recommendations to reduce consequences of human papilloma viral (HPV) infection.

**Objective 6** - Develop adult immunization programs for Hepatitis B.

## Action Steps

- ⇒ Promote rapid identification and follow-up of persons with STDs to assure adequate treatment, education, and partner counseling and referral services.
- ⇒ Provide screening services to high-risk populations with no symptoms (e.g., in family planning and teen clinics, detention centers).
- ⇒ Support community and school outreach efforts that promote risk reduction behaviors, symptom recognition, and early treatment.
- ⇒ Promote abstinence, monogamy, and sexual responsibility.
- ⇒ Educate the community about all sexually transmitted diseases, including viral STDs.
- ⇒ Build the public health infrastructure to eliminate STDs in accordance with CDC recommendations.

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## Partners

AIDS Administration, DHMH • Center for Maternal and Child Health, DHMH • Centers for Disease Control and Prevention • Emergency Nurses Association, Maryland Chapter • Epidemiology and Disease Control Program, DHMH • Johns Hopkins University • Maryland Addiction and Substance Abuse Clinics • Maryland Association of Correctional Administrators • Maryland Association of County Health Officers • Maryland Association for Practitioners in Infection Control and Epidemiology • Maryland Chapter of the American College of Emergency Physicians • Maryland Coalition for Healthy Mothers, Healthy Babies • Maryland Commission on Infant Mortality Prevention • Maryland Department of Health and Mental Hygiene (DHMH) • Maryland Department of Public Safety and Corrections • Maryland Family Planning Clinics • Maryland Gynecological and Obstetric Society • Maryland HMOs • Maryland Hospital Association • Maryland Local Health Departments • Maryland Medical Assistance Program, DHMH • Maryland Mental Health Programs • Maryland Perinatal Association • Maryland Pharmaceutical and Medical Device Manufacturers • Maryland State Department of Education • Region III Centers for Education and Training • University of Maryland School of Medicine

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### Cross-Reference Table for STDs

See Also

Caroline County .....	167
Kent County .....	234

# INCREASING SUBSTANCE ABUSE TREATMENT



## Definition

Substance Abuse refers to overuse of, and chronic addiction to, alcohol and/or other drugs, especially illegal drugs. Treatment refers to a systematic approach to stopping or substantially reducing such use, and learning appropriate social skills to lead a drug-free life.

## Problem

The Center for Substance Abuse Research estimated that substance abuse costs the State of Maryland approximately \$5.5 billion annually. Estimates of economic burdens include health consequences, victimization and criminal justice involvement, motor vehicle crashes, impaired productivity, job loss, and financial destitution.

Substance abuse impacts the quality of life for a growing number of children who suffer abuse and neglect at the hands of an addicted parent. According to the Maryland Children's Action Network, the number of children in placement is increasing, and 60% of children entering out-of-home placement in 1998 had a parent with an identified substance abuse problem. Additionally, children who live in a house with an addicted parent are more likely to become drug and alcohol users as they grow up.



According to the Department of Health and Mental Hygiene Alcohol and Drug Abuse Administration's (ADAA) *Treatment Statistical Summary FY1999 Preliminary*, 66% of clients in substance abuse treatment reported problems with alcohol, 33% marijuana, 31% heroin, 21% crack, and 17% cocaine other than crack. Many clients reported having difficulty with more than one substance.

## Determinants

For the past 30 years, literally hundreds of well-documented studies have found that substance abuse treatment is effective in reducing alcohol and drug use -- especially when it is provided within a continuum of care. These studies also indicate that treatment reduces drug use and crime, leads to an increase in employment, an improvement in physical and mental health, and also contributes to increased physical and mental health of children of substance abusing parents.

For the most part, publically funded treatment programs in the State are filled to capacity. In many cases, clients seeking treatment (especially those who are uninsured or under insured) are unable to access the full range of services necessary for recovery. The ADAA reports that state-wide, several thousand individuals are turned away from treatment programs during any given month, many more than those formally listed on the waiting list. The FY1999 ADAA Treatment Statistical Summary indicates that 44,053 clients were treated in ADAA-funded programs and 43,632

<b>Maryland Alcohol and Drug Abuse Treatment Need by Region, FY 1997</b>		
<b>Counties</b>	<b>Estimated Persons in Need of Treatment</b>	<b>ADAA Funded Slots</b>
Anne Arundel, Baltimore, Carroll, Harford, and Howard counties	66,543	5051
Montgomery, and Prince George's counties	34,741	2,261
Calvert, Charles, and St. Mary's counties	13,985	1,309
Allegany, Frederick, Garrett and Washington counties	18,346	1,484
Caroline, Cecil, Dorchester, Kent, Queen Anne's Somerset, Talbot, Wicomico and Worcester counties	23,807	1,894
City of Baltimore	60,928	5,709
<b>Statewide</b>	<b>218,390</b>	<b>17,899</b>

**Source:** Alcohol and Drug Abuse Administration, presentation to State Legislative Budget Committees, February 1998

were treated in non-funded programs. ADAA Prevalence Estimates lists 230,937 people in need of treatment statewide for 1998. Obviously, more treatment is needed. The waiting list categories indicate the types of treatment that are most in demand.

Three-quarters of Maryland's jurisdictions reported one or more emerging drugs during the Maryland Drug Early Warning System's 1999 Drug Scan. An emerging drug is one that has been perceived as a problem within the last six months to a year and is strongly connected to a specific subculture. Heroin was mentioned in 14 counties and Ecstasy in 10 counties.

Currently, there is insufficient treatment capacity in Maryland. Some treatment programs are more effective than others. Treatment is most effective when it meets individual needs and is part of a continuum of care.

Although there is growing public support for the concept of treatment, there is often difficulty establishing treatment programs in specific communities. Further, Maryland's multiple funding streams do not facilitate a coordinated continuum of care.

Ideally, a statewide system would allow for coordinated care access across funding streams, improved access for the uninsured, systemic accountability, and would provide substance abuse treatment on demand (24 hours a day, 7 days a week).

**Objective 1** - By 2010, decrease to zero the number of people on waiting lists to receive substance abuse treatment by providing more treatment availability.

**Objective 2** - By 2010, require all substance abuse treatment programs to provide evidence of positive outcomes. These outcome measures will be determined by the State of Maryland Task Force to Study Increasing the Availability of Substance Abuse Programs in consultation with ADAA.

### **Action Steps**

- ⇒ Create an Emergency Addiction Treatment Fund to pay for services for at-risk targeted populations, to be determined by the Maryland Task Force to Study Increasing the Availability of Substance Abuse Programs in consultation with the ADAA.
- ⇒ Complete a comprehensive needs assessment to clearly identify service needs within a continuum of care in each local jurisdiction.
- ⇒ Provide access to substance abuse treatment 24 hours a day, 7 days a week, for the growing numbers of uninsured and under insured in each jurisdiction.
- ⇒ Ensure that substance abuse treatment programs provide a continuum of care that includes medical and ambulatory detoxification, outpatient and residential care, successful and permanent transition to the workforce for those leaving welfare, and transitional and drug-free housing.
- ⇒ Provide technical assistance by the Department of Health and Mental Hygiene to programs to help document successful treatment outcomes, especially concerning reduced drug use, increased employment, and decreased involvement with criminal justice.
- ⇒ Continue the ongoing Health Choice Substance Abuse work group process to improve access to services for those in the *HealthChoice* program.

Partners

Alcohol and Drug Abuse Administration, DHMH • Maryland Department of Health and Mental Hygiene • Maryland Department of Juvenile Justice • Maryland Department of Social Services • Maryland Local Health Departments • Maryland Office of the State’s Attorney • State of Maryland Task Force to Study Increasing the Availability of Substance Abuse Programs

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Cross-Reference Table for Substance Abuse

See Also

Carroll County .....	172
Harford County .....	211
Queen Anne’s County .....	256
Wicomico County .....	279

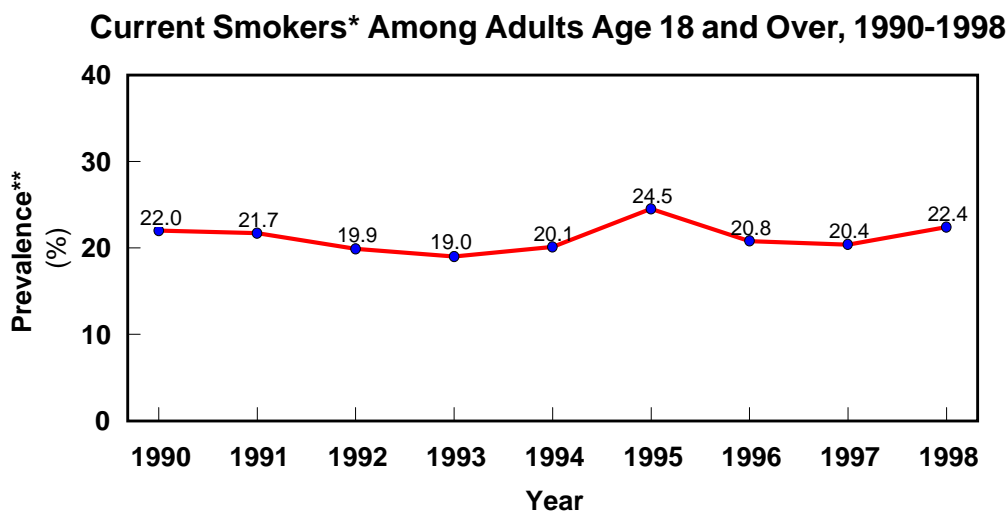
# REDUCING THE USE OF TOBACCO PRODUCTS



## Problem

The use of tobacco products is the single largest cause of preventable death each year in the United States and Maryland. More Marylanders die prematurely from their use or exposure to tobacco products than from the *combined* effects of AIDS, alcohol, car accidents, murders, suicides, illegal drug use, and fires. Tobacco-related disease is estimated to result in the premature death of 7,500 Marylanders each year. One in three youth who presently use tobacco products will ultimately die prematurely from a tobacco-related disease. Although most commonly associated with cancer, tobacco is a risk factor in many other diseases and conditions as well. Tobacco is a risk factor in the top four leading diseases causing death in Maryland: cancer; heart disease and stroke; pulmonary disease; and diabetes. The Centers for Disease Control and Prevention (CDC) has identified at least 27 separate conditions for which tobacco is a risk factor.

Tobacco use in the State by adults has declined significantly from the usage rates of the 1950s and 1960s. However, in the 1990s, this rate of decline slowed considerably and even reversed itself at times. Although Maryland does not conduct any survey of tobacco use at the county level, statewide data from 1996-1998 was recently aggregated to estimate the extent to which tobacco use varies by jurisdiction. Tobacco use by Maryland youth during the 1990s also showed contrary trends and considerable variation among jurisdictions.



\*Current smokers is defined as respondents who have smoked at least 100 cigarettes in their lifetime and now smoke everyday or some days.

\*\*Prevalence estimates were weighted to the Maryland census population; Respondents who answered "Don't know" or "Refused" were excluded from the denominator.

Source: Maryland Behavioral Risk Factor Surveillance System

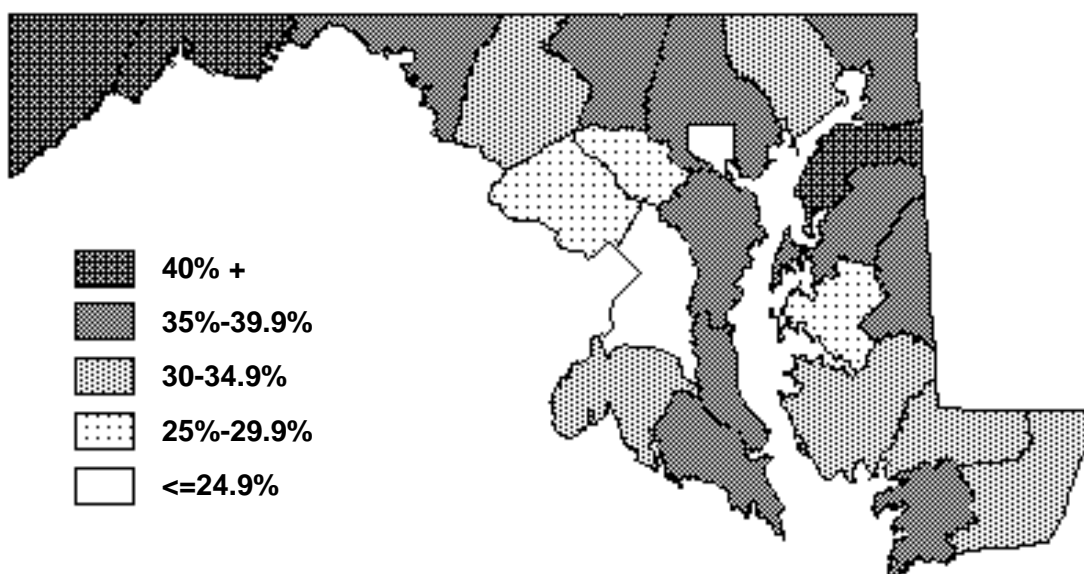


Secondhand smoke presents a very real health hazard to those in the population that suffer from asthma and other breathing disorders. Notwithstanding the federal court ruling which voided the Environmental Protection Agency's report on secondhand smoke, ample independent scientific evidence exists to establish that it represents a cancer risk. Tobacco use and exposure to second hand tobacco smoke is a problem that affects every segment of the population. Unborn infants are exposed to its effects when their mothers smoke during pregnancy. Children are affected when adults in their household smoke around them. Adult non-smokers are affected by those who smoke around them. Racial and ethnic minority groups suffer disproportionately from tobacco-related disease and remain targets of the multi-billion dollar marketing and media campaigns of the tobacco industry.

## Determinants

No single factor determines patterns of tobacco use. Research has shown tobacco use to result from a complex interaction of multiple factors, including: socio-economic status, cultural characteristics, stress, biological events, targeted marketing, pricing, and varying capacities of local communities to launch and sustain comprehensive tobacco use prevention and cessation activities and programs. The extent of tobacco use varies significantly among communities in Maryland, between age and socio-economic groups. Notwithstanding substantial decreases in the overall use of tobacco products since 1960, in the 1990s this downward trend leveled off and even reversed itself for some sub-population groups.

**Prevalence of Youth Cigarette Use  
Maryland High School Seniors, 1996-1998**



**Source:** Maryland Adolescent Survey, 1998 (Kent and Prince George's Counties are 1996 data)

**Nicotine Addiction.** Even in light of the complex interaction of factors which may lead to the initiation of tobacco use, or reinforce the propriety of continued use for the tobacco user, the primary factor underlying the long-term sustained use of tobacco products is nicotine addiction. Nicotine's ability to addict the tobacco user is greater than that of alcohol or even cocaine. With regular use, the risk of addiction to alcohol is one in nine, to cocaine one in four, and nicotine one in three. A smoker can become addicted to nicotine after smoking as few as 100 cigarettes (five packs). An estimated 50% of adult tobacco users in Maryland make serious attempts to stop using tobacco each year, with very little success.

**Youth Access to Tobacco Products.** Tobacco products may not be sold to or possessed by youth who are under the age of 18 in Maryland. Nonetheless, an estimated 10.4 million packs of cigarettes are sold to this population annually. Of those Maryland youth who reported buying their cigarettes in a store, more than half are not asked to show proof that they are of legal age to purchase them. In compliance inspections conducted in 1999, underage youth were successful in purchasing tobacco products 64.7% of the time from vending machines and 31% of the time from store clerks. Adults who use tobacco products overwhelmingly report that their tobacco use began before the age of 18. Maryland's high school seniors report similar experience. Of the youth who use tobacco products, 70% wish that they had never started and have been unable to quit on their own. If experimentation and initiation of tobacco use can be delayed to adulthood, preferably after age 24, then there is substantially less likelihood of becoming a lifetime tobacco user.

**Tobacco Industry Marketing and Advertising.** The tobacco industry invests in excess of \$6 billion annually to promote the use of its products in the United States. Although the industry claims that none of this effort is aimed at the youth market, research shows that, in fact, this is the market that they are reaching. The "Joe Camel" icon was as recognizable to children as Mickey Mouse in one survey. Internal industry documents detail the importance of capturing the youth market and enticing them to use their company's brand of cigarette. Fruit flavors, particularly appealing to the young, have been added to smokeless tobacco and to the imported Indian cigarettes known as "bidis." The tobacco industry has paid scientists to dispute evidence of nicotine addiction and the health hazards that tobacco use creates, and then failed to disclose their financial support of these scientists.

**High-Risk Sub-Populations.** The tobacco industry's marketing efforts have targeted youth, women and minority groups. As a result, their use of tobacco products in Maryland is now comparable to the general population as a whole. However, minorities are disproportionately impacted by tobacco-related disease. In 1996 for example, the incidence of lung and bronchus cancers among the African-American population was 22.5% higher than in the white population. Recent studies hint that the higher incidence of disease may be due to differences in how nicotine is metabolized, heightening the addictiveness of nicotine and thus leading to greater intensity of tobacco use. Among Maryland adults, the greatest disparity in tobacco use is between income groups.

The overarching goals for 2010 are to: 1) increase the quality and years of healthy life; and 2) eliminate health disparities. Reducing the overall use of tobacco products and eliminating disparate high use among high-risk populations will achieve these two goals. In the fall of 1998, Maryland joined in a Master Settlement Agreement to settle state lawsuits against the tobacco industry. Under the terms of that settlement, Maryland will receive an estimated \$4.2 billion over the next 25 years, deposited to the Cigarette Restitution Fund (CRF). The CRF is a “special fund” from which the General Assembly may appropriate funding for programs dedicated to tobacco use prevention, cancer, or any other public purpose.

In the summer of 1999, Governor Glendening appointed the Task Force to End Smoking in Maryland and charged it with developing specific goals and programs for reducing tobacco use in Maryland, with the proceeds of the settlement being made available by him from the CRF to fund recommended activities. These objectives include:

**Objective 1** - By 2010, reduce tobacco use among Maryland adults by 50% from the 2000 base rate.

**Objective 2** - By 2010, reduce tobacco use among Maryland school-age youth by 50% from the 2000 base rate.

**Objective 3** - By 2010, reduce the proportion of women who use tobacco products during pregnancy by 50% from the 2000 base rate.

**Objective 4** - By 2010, increase the proportion of women who quit smoking because of pregnancy by 50% from the 2000 base rate.

**Objective 5** - By 2010, have all health plans in Maryland include smoking cessation as a covered service.

**Objective 6** - By 2010, have at least 90% of primary care providers provide smoking cessation advice and support to their patients who use tobacco products.

**Objective 7** - By 2010, have tobacco retailers achieve a 99% compliance rate with Maryland’s laws prohibiting the sale of tobacco products to minors.

**Objective 8** - By 2010, decrease the number of children who are exposed to secondhand smoke by 75% from the 2000 base rate.

**Objective 9** - By 2010, have locally developed tobacco use prevention and cessation coalitions operating in every Maryland county and the City of Baltimore.

## Action Steps

In April 2000, the General Assembly codified significant portions of the Task Force Report, and delineated a phased implementation plan for an ambitious new Tobacco Use Prevention and Cessation Program in SubTitle 10 of the Maryland General Health Article (Senate Bill 896 and House Bill 1425). The “Action Steps” outlined below are driven by the mandate of that legislation.

- ⇒ Conduct baseline tobacco studies of youth and adult tobacco use in Maryland, using the Youth Tobacco Survey and the Adult Tobacco Survey as formulated by the Centers for Disease Control and Prevention.
- ⇒ Undertake formative research in support of a counter-marketing campaign.
- ⇒ Facilitate the development of tobacco use reduction and cessation plans in each county and in the City of Baltimore which address: smoking cessation, tobacco use by school-age youth, community-based tobacco control programs, enforcement of existing youth access laws, reducing exposure to secondhand smoke, and eliminating disparities in tobacco use among high-risk populations. Develop jurisdiction-specific tobacco control goals and objectives in support of the 2010 objectives herein.
- ⇒ Develop and issue Requests for Proposals in support of a counter-advertising campaign and a grant process for funding community-based tobacco use reduction and cessation activities.
- ⇒ Institute a data collection and evaluation process whereby program design can be informed and enhanced on an ongoing basis and progress towards achieving goals can be assessed.
- ⇒ Actively coordinate community-based tobacco control activities and provide technical assistance as requested to those involved in such activities.
- ⇒ Establish a formal advisory body to provide insight and concerns from high-risk population groups, the latest scientific information, input from local coalitions, and the perspectives of interested statewide organizations.

Partners

Maryland Department of Health and Mental Hygiene (DHMH) • Maryland Local Health Departments • Office of Health Promotion, Education, and Tobacco Use Prevention, DHMH • Supporters of the Task Force to End Smoking in Maryland

Related Reports

Alcohol and Drug Abuse Administration, Maryland Department of Health and Mental Hygiene. (1999). *Maryland Synar report*.

Centers for Disease Control and Prevention. (1999, August). *Best practices for comprehensive tobacco control programs*. Report. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.

Maryland Department of Health and Mental Hygiene, Task Force to End Smoking in Maryland. (1999, December). *Making Maryland the tobacco-free state*.

U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention. (1998). *1988 Surgeon General Report: The Health Consequences of Smoking: Nicotine Addiction*. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service.

Cross-Reference Table for Tobacco

See Also

Dorchester County .....	194
Somerset County .....	265



### III. LOCAL FOCUS AREAS

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#### Local Health Departments

Maryland's 24 local health departments (LHDs) provide core public health functions of assessment, policy development and assurance to residents at the local level. These efforts are directed by a local health officer who is appointed by the elected officials in the jurisdiction, and approved by the State Health Secretary. The LHDs receive federal, state, and county funds through categorical, targeted, and other funding streams. Various grants from other sources may supplement these funds.

The 1989 Institute of Medicine (IOM) report entitled *The Future of Public Health* labeled local health departments "the critical components of the public health system that directly deliver public health services to citizens." Local health departments conduct a multitude of activities focused on preventive health care and health promotion. In many cases, local health departments provide direct clinical care in the areas of family planning, chronic disease care, mental health services and home health. For services that they don't deliver directly, LHDs become involved in the coordination of care through a network of local providers. LHDs are very active in community health assessment with an emphasis on improving access to services needed by the medically underserved.

Each local health department is organized into several units to accomplish selected functions. In addition to administrative services, the direct service divisions may include Disease Control, Food Control, Environmental Health, Addictions, Adult Health, Family Planning, Maternal and Child Health, Mental Health, Home Health Services, Community Health Education, Outreach, and School Health.

Maryland's 24 local health departments are at varying stages in their efforts to establish and promote involvement of their local communities in identifying health priorities and crafting strategic plans to address those priorities. The levels of readiness and outreach depend on the extent of the LHDs' available resources, especially staff with technical and planning expertise, as well as local political will and overall funding to support and promote such a process. The modules included in this Health Improvement Plan reflect these variations in local infrastructure, as well as, the LHD's readiness and interest in participating in the HIP development process. Many LHDs have programs and/or priorities that address relevant statewide priorities.

# ALLEGANY COUNTY

## Selection of Focus Area

On August 20, 1999, the Mountainside Community Coalition's Health Improvement Committee reviewed health data from the Maryland Department of Health and Mental Hygiene's "Consensus Indicators for Community Health," data for Allegany County's Annual CORE Health Plan, the Mountainside Community Coalition's Health Report Card, and the Report for the Western Maryland Economic Development Task Force. The Committee identified 12 health concerns and used the APEX process to identify access to health care as the number one problem in Allegany County (for the uninsured or underinsured, in the 19-64 and 65 years and older age groups). The other health concerns in descending rank are:

- Dental Disease
- Elder Care
- Heart Disease
- Cancer, Smoking
- No Mammography
- Substance Abuse
- Mental Illness
- Early Childhood
- Teen Pregnancy (less than 20 years old)
- Chronic Obstructive Pulmonary Disease

### DEMOGRAPHIC OVERVIEW

#### Estimated Population, by Race – 1998

Total .....	71,330
White .....	96.6%
Other .....	3.4%

#### Estimated Population, by Age – 1998

Under 1 .....	750	18-44 .....	24,230
1-4 .....	2,840	45-64 .....	17,130
5-17 .....	13,010	65+ .....	13,370

All causes Mortality Rate (age-adjusted, per 100,000 population) 1996-1998 ..... 491.6

Infant Mortality Rate 1995-1999 ..... 5

Estimated Mean Household Income – 1999 ..... \$40,900.00

Estimated Median Household Income – 1999 ..... \$29,000.00

Civilian Unemployment Rate, Annual Average – 1999 ..... 7.1

#### Labor force (Top 4)-1995

Services .....	10,400	Government (Federal, Military) .....	5,800
Retail Trade .....	8,200	State & Local Government .....	4,900

**Sources:** Maryland Vital Statistics, 1999  
Maryland Department of Planning, 1995, 1998, 1999



## Focus Area 1 - Promoting Access to Health Care for the Uninsured

### Problem

Access to timely and necessary clinical preventive and primary care through proper insurance coverage is key for safeguarding good health. Data show that people without health insurance use fewer health care services, are more likely to go without needed prescriptions, and are often unable or unwilling to obtain necessary health care. The impact of the lack of health insurance on individuals and the burden placed on community resources is evidenced by people who delay care and are sicker when they enter the health care system. These sicker people often need more intensive and expensive services than those who access the health care system before they become acutely ill.

### Determinants

Allegany County's poor economy poses a significant barrier to accessing quality health care. The impact of the County's poor economy is evident in high unemployment, low median income, high poverty, and a high percent of persons who are medically uninsured/underinsured.

Employment is a major factor in determining whether individuals have private insurance. While the unemployment rate for 1999 in Allegany County was 7.1, the rate for 1996-1999 averaged 8.6% compared to 4.6% for the State of Maryland.

Unemployment Rates in Allegany County and Maryland, 1996-1999					
Jurisdiction	1996	1997	1998	1999	Average
Allegany	8.8%	9.8%	8.8	7.1	8.6%
Maryland	4.9%	5.1%	4.6	3.6	4.6%
<b>Source:</b> Maryland Department of Labor, Licensing and Regulation					

On a related measure, the percent uninsured among Allegany County residents (<65 years old) is approximately 21.5% compared to 13.5% for the State. Moreover, many county governmental and private programs, which previously acted as a "safety net" for the uninsured, have experienced cutbacks, and their ability to provide needed supplemental assistance has been seriously threatened. For example, the Allegany County School Health Program, offering children prevention, screening and clinical services, ensures that needed health care will be received by vulnerable populations with financial and geographic access difficulties. This program is slated for significant cutbacks for FY 2001. The problem is most pressing for working persons, 19 to 64 years old who fall within 250% of poverty, and for single working mothers.

The ability to pay for care out-of-pocket or for co-insurance costs is directly tied to being paid livable wages (income levels). The 1996 median income in Allegany County was \$24,500; for the state it is \$45,500. Persons below 200% of poverty comprise 36.6% unemployment for residents of Allegany County versus 19.2% for Maryland.

#### Income Data for Allegany County and Maryland, 1990 and 1995

Jurisdiction	Per Capita	Median	% Persons Below Poverty
Allegany	\$16,983	\$24,300	16.5%
Maryland	\$24,677	\$47,700	8.3%

**Source:** Bureau of Census (1995 Estimates); Poverty: 1990 Census

The availability of community resources reflects alternative programs from public and private sources to ensure access to care. Major community programs that help local residents obtain needed care include Allegany Health Right, Western Maryland Health Systems (Hospital Emergency Care), Allegany County Health Department programs like School Health, Breast & Cervical Cancer Screening, Dental Services and the Maryland Health Care Foundation Grants.

Unfortunately, many of these programs have criteria limitations, or restrict access to care to low income working persons. For example, Allegany Health Right employs explicit criteria which limits participation to persons with near poverty income who have an attending physician.

#### Uninsured Data for Allegany County and Maryland, 1997

Jurisdiction	Uninsured <65 Years Old	Uninsured & Unserved <65 Years Old	<200% Poverty
Allegany	13,652 21.5%	13,165 20.7%	28,453 36.6%
Maryland	594,377 13.5%	507,289 11.8%	921,499 19.2%

**Source:** "Primary Care Access Plan, 1997": Tables 1b, 5 & 6, DHMH, CPHA

**Objective 1** - By 2005, 90% of Allegany County residents will have access to health care through appropriate health insurance coverage (Baseline: 78.5%).

**Objective 2** - By 2005, expand Maryland Children Health Insurance Program (MCHIP) coverage to include parents of children up to 300% of federal poverty level (Baseline: Children: 92%; Parents: 0%).

**Objective 3** - By 2005, establish a single point of contact for the uninsured in need of medical and pharmacological care.

### **Action Steps**

- ⇒ Support the Western Maryland Economics Task Force in their efforts to develop jobs that offer livable wages and provide affordable health insurance benefits.
- ⇒ Promote collaboration among Coalition members to serve the uninsured such as Expansion of Health Right Coverage/Community Clinics, and by creation of a central point for needy persons to obtain medical/pharmacy services (the Department of Social Services could serve as the focus for this referral point).
- ⇒ Explore grants for developing infrastructure to cover uninsured.
- ⇒ Explore options for group purchase of low cost health insurance.
- ⇒ Advocate for legislation to expand MCHIP to include family members.
- ⇒ Advocate for legislation to increase MD Pharmacy Assistance Threshold (Baseline: \$804/Individual; \$870/Couple).

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### **Partners**

Allegany County Health Department • Allegany Health Right • Department Of Social Services • Maryland Health Care Foundation • Western Maryland Area Health Education • Western Maryland Health System • United Way

### **Related Reports**

Russell, Terry J. (1998). *Western Maryland regional health and human services survey, 1998*. Survey. Report for the Allegany County United Way and the Western Maryland Health System.

## Focus Area 2 - Oral Health

### Problem

Oral disease includes dental caries (infectious disease of the tooth surface), periodontal disease (diseases of the gum, jaw-bones, and tissue supporting the teeth), and oral diseases from cancer and other cranio-facial conditions. Oral disease, if unattended, leads to needless pain, suffering, poor nutrition, difficulty speaking, chewing, and/or swallowing, loss of self-esteem, decreased economic/school productivity, and increased cost of care.

Dental caries is the most common infectious disease of U.S. children. Dental caries, gingivitis and periodontal disease also continue to plague many adult Americans. Without doubt, the major burden of oral disease rests on those who are most disadvantaged, and therefore most at risk to be unable to access dental services. Lack of ability to pay for dental services, lack of transportation to needed services, and lack of understanding of the importance of routine preventative dental care all contribute to an increased rate of dental disease.

Selected Dental Health Indices			
Indices	Allegany *	MD**	USA***
# Teeth with Decay <sup>(a)</sup>			
6-7-Year-Old	5	3	1
17-Year-Old	N/A	5	4
(Total Cumulative Decay)			
Population in Municipal Water Systems with Fluoridation <sup>(b)</sup>	^0%	85%	56%
Sealant use among School Children	8%	20%	19%
<sup>(a)</sup> Decayed, Missing, or filled teeth (DMF) <sup>(b)</sup> CDC Fluoridation Fact Sheet, As of 12/93 <b>Sources:</b> *Allegany Co. H. Dept. Dental Screening Records (1991-98) **DHMH 1995 Survey of the Health Status of Maryland School Children; ***1991 NHANES III Study			

Tooth decay, gum disease and other dental diseases are prevalent in Allegany County. County children have the worst record for the prevalence of tooth decay among the 24 Maryland jurisdictions. Two major factors contributing to this condition are the absence of fluoridation in public water systems and poor access to dental care. Additionally, there is sporadic use of oral fluorides and dental sealants even in the absence of public water fluoridation. Public water fluoridation is currently not available to local residents. Almost 10 years ago the county, led by the medical community, tried to get fluoridation for the city of Cumberland and succeeded by vote, but the decision was overturned a month later through a referendum during a mayoral election.

There is inadequate available personal information on good dental hygiene. Residents, especially those enrolled in Managed Care Organization (MCO) Medicaid programs, experience poor access to routine clinical dental preventive care. Many dentists do not participate in Medicaid given the low reimbursement level and "No Show" reputation of Medicaid patients.

According to local dental providers, the prevalence of dental disease in Allegany County is alarming. Despite attempts to educate the community through prenatal courses at the hospital system and in Women, Infants, and Children (WIC) clinics, there are numerous cases of early childhood caries and severe inflamed dentition as a result of delayed dental care. Moreover, other local norms, such as a high prevalence of smokers--particularly among teens, poor nutritional choices, and the low value placed on dental care given competing financial demands for other basic necessities, contribute to the poor dental health status of Allegany County residents.

The ability to get screening and treatment is directly related to finances, manpower, geographic, and cultural barriers. Access to dental care for residents in Allegany County is problematic because of low income and high percentage of persons who are uninsured. The percent of persons without health insurance in Allegany County is about one and half times that of the State, and the median income for Allegany County is considerably lower than the State.

The community's educational level, as measured by the number of high school graduates and persons with college educations, is lower than the State as a whole. Local dental providers cite that general dental education among residents is quite poor. There is widespread disregard for good dental hygiene, use of dental sealants and routine visits to dental providers.

Education Data		
Percent Of Individuals >25 Years Old:	Alegany	Maryland
With No High School Diploma	29.0%	21.6%
With No Bachelor Degree	82.2%	68.3%
Source: U.S. Bureau of Census, 1990		

**Objective 1** - By 2005, 40% of Allegany County residents will have access to dental health care through appropriate insurance coverage.

**Objective 2** - By 2005 increase dental sealant use by 20% among all children at age eight in Allegany County.

**Objective 3** - By 2005, 80% of the population served by the public water system in Allegany County will receive optimal levels of fluoridation.

### **Action Steps**

- ⇒ Improve communications by presenting data on the local prevalence of dental disease to the Western Maryland Economic Development Task Force.
- ⇒ Identify resources to pay the cost of conducting education and preventive care with Western Maryland Area Health Education Center (WMAHEC), the Allegany County Health Department, Maryland Health Care Foundation, Maryland Office of Dental Health, Maryland Physicians Care, Allegany Health Right, and the County United Way.
- ⇒ Increase access to dental providers for treatment and prevention services for low income residents through grants and collaborative programming among local providers.
- ⇒ In conjunction with the Western Maryland Area Health Education Center recruit dentists, especially for those who serve low income persons.
- ⇒ Target vulnerable population subgroups for delivering educational and screening services like teenage females, and Head Start clients.
- ⇒ Advocate fluoride in local public water systems in collaboration with the Allegany-Garrett Dental Society, Rotary Club and others.

Partners

Allegany County Health Department • Allegany-Garrett Dental Society • Allegany Health Right • Allegany Office of Children, Youth and Families • Department of Social Services • Head Start • Rotary Club • Western Maryland Area Health Education Center • Western Maryland Economic Development Task Force • Women, Infants and Children

Related Reports

Maryland Department of Health and Mental Hygiene; Office of Child Health; Department of Pediatric Dentistry; University of Maryland Baltimore College Dental School. (1995). *A survey of the oral health status of Maryland's school children, 1994-95.*

Cross-Reference Table for Allegany County

See Also

Access to Health Care .....	24
Oral Health .....	107

# ANNE ARUNDEL COUNTY

## Selection of Focus Area

Access to care for the uninsured has been a priority for Anne Arundel County since 1992, when “inadequate access to primary care” was identified as one of four leading public health issues in a community needs assessment conducted for the Anne Arundel County Department of Health.

Through partnerships with County providers, efforts have been made to provide comprehensive health coverage to low income County residents. Access to care remains a high priority for the County.



The Anne Arundel County Department of Health's Fiscal Year 2001 priorities also include:

- Expanding cancer prevention/education/tobacco use prevention/cessation programs;
- Expanding community-based substance abuse treatment programs;
- Monitoring preventable infant and child fatalities and providing services for at-risk families to assure the health and safety of children;
- Ensuring safe drinking water throughout the County;
- Detecting and responding to emerging infectious diseases; and
- Reducing unintentional injuries among children and the elderly.

### DEMOGRAPHIC OVERVIEW

#### Estimated Population, by Race – 1998

Total .....	476,060
White .....	81.7%
Other .....	18.3%

#### Estimated Population, by Age – 1998

Under 1 .....	6,490	18-44 .....	201,620
1-4 .....	24,570	45-64 .....	107,210
5-17 .....	88,740	65+ .....	47,430

All causes Mortality Rate (age-adjusted, per 100,000 population) – 1998 ..... 459.2

Infant Mortality Rate 1995-1999 ..... 6.8

Estimated Mean Household Income – 1999 ..... \$76,300

Estimated Median Household Income – 1999 ..... \$63,600

Civilian Unemployment Rate, Annual Average – 1999 ..... 2.8

#### Labor force (Top 4) –1995

Government (Federal, Military) .....	72,900	Retail Trade .....	45,100
Services .....	68,800	State & Local Government .....	22,600

**Sources:** Maryland Vital Statistics, 1999  
Maryland Department of Planning, 1995, 1998, 1999



## Access to Health Care for the Uninsured in Anne Arundel County

### Problem

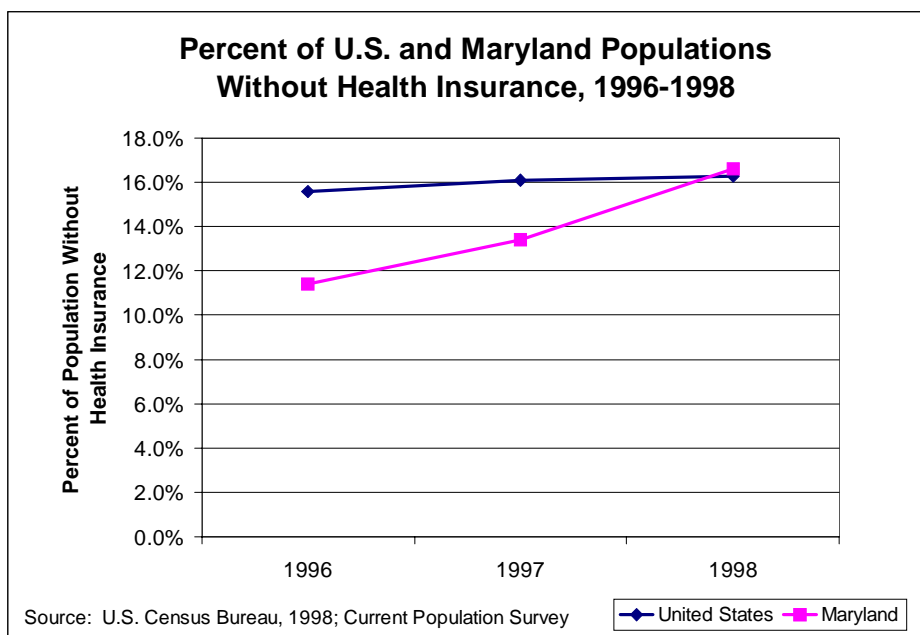
Based on U.S. Census Bureau estimates, there are approximately 42,000 people without health insurance in Anne Arundel County. This is 9% of the County's population — short of the Healthy People 2010 objective to eliminate the number of people without health insurance, but lower than Maryland's 1998 uninsured rate of 16.6% and the U.S. 1998 rate of 16.3%. Since a large majority of Anne Arundel County's Medicaid-eligible children have been enrolled in the Maryland Children's Health Program and other Medicaid programs, and since nearly all persons age 65 and older have Medicare coverage, most of the uninsured are between the ages of 20 and 64.

People without health insurance are more likely to have no regular source of medical care and are less likely to obtain preventive health care. These factors can reduce the quality of life, create higher rates of hospitalization for complications of disease and illness, and increase the likelihood of dying while hospitalized.

For many years increasing access to care has been a priority for Anne Arundel County. Inadequate access to primary care was identified as number one of four key issues in a community needs assessment conducted for the Anne Arundel County Department of Health in 1992. A partnership was formed in 1994 between the Health Department and North Arundel Hospital to provide primary care services to indigent County residents without health insurance. When North Arundel Hospital's New American Health dissolved in 1998, the Local Health Planning Board worked with the Health Department to develop a new, more comprehensive program of health services for low-income uninsured residents. Access to care remains a high priority.

### Determinants

Despite the nation's strong economy and low unemployment rate, the number of Americans without health insurance continues to grow each year. The age group most likely to be uninsured is 18- to 24-year-olds. In this age group, 30% are uninsured. Additionally, approximately 90% of uninsured adults are working.



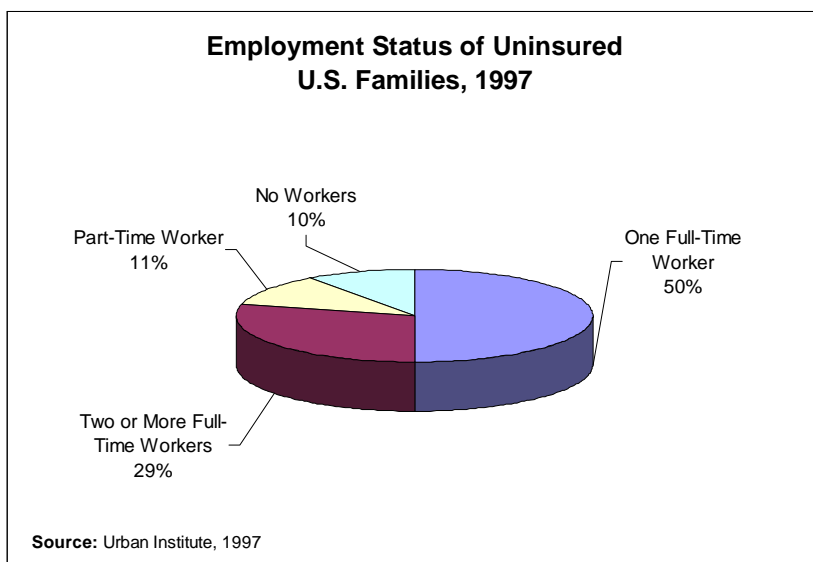
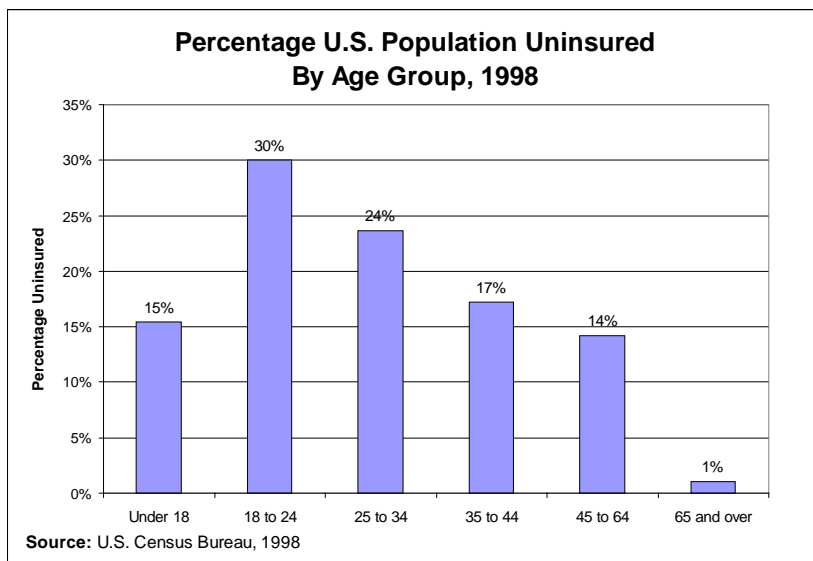
## Why are People Uninsured?

The most significant explanation for the increase in numbers of uninsured people is that health insurance has become too expensive. Forty-eight percent of uninsured workers are employed by small businesses, many of which may not be able to afford health insurance coverage for their employees. Some may offer health insurance, but require employees to pay a large share of insurance premiums. Wages have not kept pace with the increases in health insurance premiums and deductibles. Family deductibles increased more than 80% between 1988 and 1996, while wages increased only 31%. Seventy-two percent of uninsured workers earn less than \$20,000 per year. Other family priorities such as housing, food, and clothing take precedence over insurance.

## What is the Impact of a Lack of Health Insurance?

Studies indicate that over 50% of people without health insurance have no regular source of care. Many are forced to postpone medical care when they need it, and some may not fill prescriptions because of their cost. As a result, uninsured adults have poorer health outcomes than adults with health insurance. Uninsured adults are less likely to obtain preventive health care, resulting in higher rates of hospitalization for complications of disease and illness and a higher likelihood of dying while hospitalized.

The cost of delaying treatment affects all of us. The cost of unreimbursed hospitalization is borne by those with health insurance coverage, through higher hospital rates paid by private and public health insurance programs. This increases our premium dollars and our tax dollars. In addition, increased illness results in reduced productivity and earlier loss of life.



## Anne Arundel Programs

The Healthy People 2010 Goal is to “improve access to comprehensive, high-quality health care services.” Anne Arundel County’s Goal is to reduce the number of uninsured Anne Arundel County adults ages 20 to 64 by 10% through development of the Residents’ Access to a Coalition of Care, or REACH, Program. While there are an estimated 42,000 uninsured Anne Arundel County residents, not all uninsured residents have low enough incomes to qualify for REACH assistance, thus reducing the number to be targeted by the program. In addition, the number of physicians in Anne Arundel County who will be willing to assume responsibility for treating REACH enrollees at greatly reduced fees is not expected to grow sufficiently to enroll more than 4,200 individuals by 2010. Efforts are under way on both the State and Federal levels to provide greater access to health care to people without health insurance. We expect to use our experience in developing the REACH program to advocate for expansion of health care coverage for the uninsured, on both a national and a statewide basis. It is our hope that the Federal and State governments will develop other programs to increase access to health care for low-income adults ages 20 to 64 prior to 2010 to assist Anne Arundel County in providing health care access to eligible individuals the REACH Program cannot serve.

**Objective 1** - Develop the REACH Program as the vehicle for providing health care to 4,200 low-income uninsured Anne Arundel County residents by the Year 2010. (Baseline 1999: 0) The Program will rely on contracts with local hospitals and health care providers who agree to provide services to eligible patients at reduced fees. The Anne Arundel County Department of Health will determine eligibility for the program and provide case management services. Individuals with incomes of up to 200% of the Federal Poverty Level will be eligible.

**Objective 2** - The provider network will include primary and specialty care physicians, pharmacies, laboratory services and radiology services. By Fiscal Year 2001, the REACH Program will have enrolled over 100 primary and specialty care physicians, at least four pharmacies, and laboratory and radiology services. (Baseline 1999: 0)

**Objective 3** - By the end of Fiscal Year 2001, enroll 1,000 low-income adults in the REACH Program. (Baseline 1999: 0)

**Objective 4** - Perform annual analysis of the number of uninsured individuals in Anne Arundel County using the Year 2000 U.S. Census, expanded Behavioral Risk Factor Surveillance System data, the Current Population Survey, and other tools and methodologies that become accepted practice. Using this information, advocate on a state and national basis for expanded health care coverage for low-income uninsured adults.

**Objective 5** - If, after reviewing utilization patterns for Fiscal Years 2000 and 2001 and evaluating program performance, we believe that this program is providing increased access to care for the uninsured, we will increase the number of enrollees to 2,000 by the end of Fiscal Year 2002. (Baseline 1999: 0)

**Objective 6** - By 2010, enroll 10% of the uninsured population, or approximately 4,200 individuals in the REACH Program. (Baseline 1999: 0)

### Action Steps

- ⇒ Establish a work group within the Anne Arundel County Department of Health to study access to health care for Anne Arundel County's uninsured adults and work with the Local Health Planning Board to develop a framework for the REACH Program.
- ⇒ Create a partnership with the County's health care community to offer low cost services for low-income uninsured adults. Present a proposed REACH Program model to the Anne Arundel County Medical Society, and form a partnership between the Health Department and the Medical Society to develop and run the program.
- ⇒ Define eligibility requirements and processes of enrollment, referral, and financial responsibility.
- ⇒ Continuously enroll Anne Arundel County primary and specialty physicians in the program by mailing information to all area physicians through County Medical Society mailing lists and visiting physician groups to discuss the program.
- ⇒ Enroll low-income uninsured adults in the program. Begin by enrolling approximately 300 individuals who were previously enrolled in the County's Primary Care Program (through the former New American Health, which stopped providing primary care services in December 1998). After the initial 300 people are enrolled, target for enrollment parents of children enrolled in the Maryland Children's Health Program.
- ⇒ Establish a not-for-profit entity to apply for grant monies and accept donations and other funds to help pay for expensive prescription drugs or further expansion of the REACH Program.
- ⇒ Evaluate program effectiveness. Evaluate utilization to assure that enrollees are accessing care. Provide case management to those who are not. Assess whether or not physicians are able to accept additional patients, and, if so, continue to expand enrollment until 10% of uninsured adults are enrolled.
- ⇒ Work with state and federal legislators, the medical community, and businesses to develop options for expanding health care coverage for low-income uninsured individuals.

Partners

Advanced Radiology • American Radiology • Anne Arundel County Department of Health • Anne Arundel County Lions Club (Glasses and hearing aids) • Anne Arundel County Medical Society • Anne Arundel Diagnostics • Anne Arundel Health System • Capital Gazette Communications, Inc. • Harbor Hospital • HealthSouth Rehabilitation Centers • Helix Health System • University of Maryland (Consultant) • Kernan Physical Therapy at Shipley’s Choice • Nighttime Pediatrics and Adult Care, Too (Urgent Care) • North Arundel Hospital • Patuxent Medical Group • Quest Diagnostics, Inc. • Rite Aid, Giant, Maryland, CVS, and Neighborcare Pharmacies • The Stewart Group, Inc. • Tullier Marketing Communications

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Cross-Reference Table for Anne Arundel County	
See Also	
Access to Health Care .....	24

# BALTIMORE COUNTY



## Selection of Focus Area

Access to care has been an ongoing issue of concern in Baltimore County for many years. Several groups, including the Baltimore County Health Council, contributed information and assisted in the selection of the focus area for the Health Improvement Plan. The selection was unanimously agreed upon by the Local Health Officer and the Local Health Department Bureau Chiefs. In addition to access to care, the Baltimore County Health Department's priorities for FY 2001 are: infant mortality and infants with low birth weight, risk-taking behaviors of teens, outreach to the homeless, and the health and social needs of seniors.

### DEMOGRAPHIC OVERVIEW

#### Estimated Population, by Race – 1998

Total .....	721,880
White .....	80.6%
Other .....	19.4%

#### Estimated Population, by Age – 1998

Under 1 .....	8,920	18-44 .....	286,530
1-4 .....	34,160	45-64 .....	161,510
5-17 .....	117,450	65+ .....	113,310

All causes Mortality Rate (age-adjusted, per 100,000 population) 1996-1998 ..... 465.6

Infant Mortality Rate 1995-1999 ..... 7.8

Estimated Mean Household Income – 1999 ..... \$67,700

Estimated Median Household Income – 1999 ..... \$51,700

Civilian Unemployment Rate, Annual Average – 1999 ..... 3.7

#### Labor force (Top 4) – 1995

Services .....	133,900	Government (Federal, Military) .....	52,600
Retail Trade .....	82,400	Manufacturing .....	39,400

**Sources:** Maryland Vital Statistics, 1999  
Maryland Department of Planning, 1995, 1998, 1999

## **Increasing Access to Care by Eliminating Barriers in Baltimore County**

### **Definition**

Access to care may be defined as an ability to secure medical services and resources in response to a health care need. Implicit in this statement is that these endeavors must be unencumbered. There must be an ability to pay for services, adequate supply of health care providers who can communicate in a culturally sensitive environment, and the availability of transportation for medical appointments.

### **Problem**

Many factors may act as barriers to accessing health care services, including lack of health insurance, unsuitable transportation, inability to communicate in a common language, and misunderstandings due to cultural differences.

If an individual lacks health insurance, he or she is likely to avoid screening and treatment for preventable illness and will only address the condition when it reaches a critical stage. Many of the patients end up in the emergency room, adding millions of dollars in cost to the hospital system annually. Other poor families must choose between medical attention and providing food and shelter for their families, usually opting for the latter. Baltimore County has a substantial uninsured population.

Lack of transportation to a medical appointment frequently results in a cancellation. If the perceived transport mode is anticipated to complicate other life issues, such as work or school, the appointment probably will be delayed or not rescheduled at all. Baltimore County's transportation system is complex and limited.

The migrant and immigrant population poses a special challenge for county health care providers. First, there are language barriers, for which there are limited resources. Translation services are costly and not widely available. Secondly, many physicians and other health care practitioners are unfamiliar with minority client needs and cultural differences. For example, among some groups, there is a distrust of doctors and the health care system in general, while other cultures may not allow a male doctor to examine a female patient. There is no formal set of guidelines to address these issues. Baltimore County has increasing minority and immigrant populations.

### **Determinants**

#### **Uninsured**

Although the majority of Baltimore County residents have some form of health insurance, there are more than 93,000 people who don't. Many of these are the working poor. While the new federal/state Children's Health Program provides coverage for many of the previously uninsured children, approximately 16,000 children and an additional 70,000 adults still lack coverage.

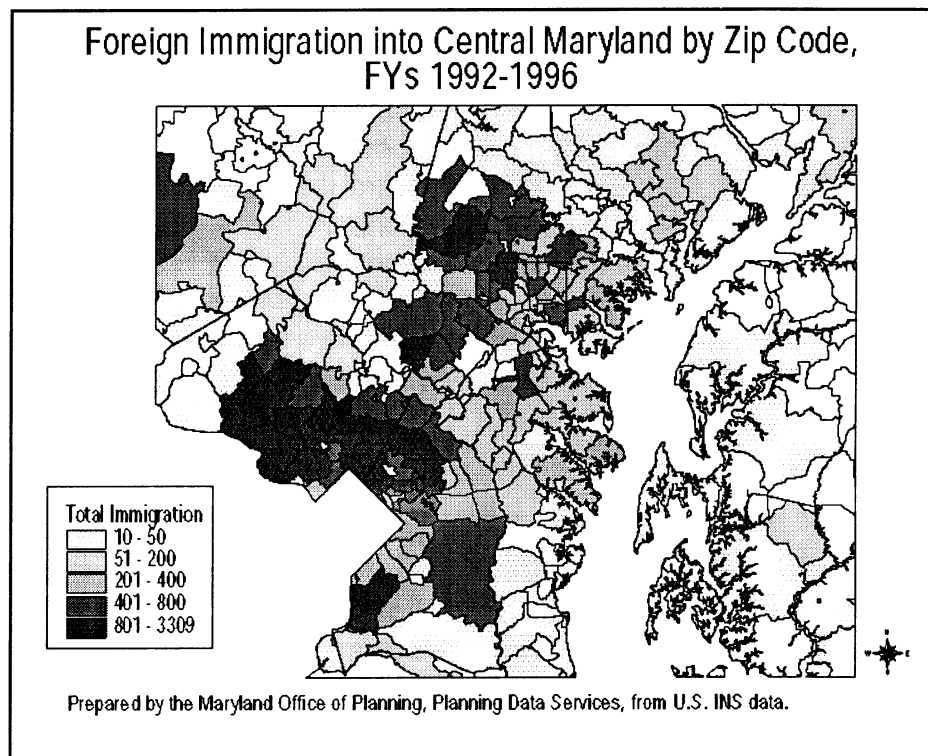
Baltimore County Health Department provides many services to the uninsured and under-insured through sliding-scale fee clinics, nurse visits to homeless shelters, mental health outreach teams for the homeless, partnerships with the Medical and Dental Societies that provide free or reduced-fee services, and enrollment in the Maryland Children's Health Program. In addition, during the past year a collaboration with Kaiser Permanente enrolled 300 individuals in The Partnership, a program that offers a comprehensive medical package to eligible uninsured residents for a small monthly fee. This program filled to capacity immediately and a waiting list grew so large that it had to be closed.

## Transportation

Due to the configuration and size of Baltimore County (over 600 squares miles) transportation remains a major barrier for individuals without access to private vehicles. Most MTA buses in Baltimore County are routed through the city, so that a person on the west side (e.g., Randallstown) of the county must take a bus into the city and transfer one or more times to get to the central section (Towson) of the county. Where it would take about 20 minutes in a car, this process may take up to two hours by public transportation. Such constraints make it impractical for many individuals to keep medical appointments.

## Language/Cultural Differences

In Baltimore County, there has been an influx of foreign-language speaking immigrants in recent years (see map). During the five year period 1992-1996, there were 4,546 immigrants who spoke Russian, Hindi, Chinese, Hausa, or Korean. Altogether there have been 12,583 international migrants since 1990. Many cannot speak English and interpreters are scarce. This situation leads to inaccurate information-sharing, refusal and/or delay of treatment, and occasionally altercations - (One member of an immigrant family was severely beaten for conversing with a public health nurse, since others thought she was revealing information to an immigration official). The deaf population is another population with special needs, as few health care workers use sign language.





The racial make-up of the county changed dramatically through international migration, and also as Baltimore City residents moved to the suburbs over the last two decades. In 1970, the non-white population in Baltimore County was 22,858. In 1998, the minority population had grown to 140,355. Many local physicians are not trained in the special needs of this changing population.

**Objective 1** - By 2010, reduce the number of uninsured children by 50% through enrollment in Maryland Children's Health Program (MCHP) (Baseline = 16,000 uninsured children) and reduce the number of uninsured adults by 5% through enrollment in low-cost health insurance programs (Baseline = 70,000 uninsured adults).

### **Action Steps**

- ⇒ By 2001, establish a liaison in each of the 92 public elementary schools to educate families about MCHP and assist with the enrollment process.
- ⇒ By 2001, develop a comprehensive plan to reach families at health fairs and related school and community events for enrollment in MCHP
- ⇒ By 2001, develop a long-term focused media plan to reach eligible families for enrollment in MCHP.
- ⇒ Starting in 2001, secure additional enrollment slots in The Partnership. (350 average per year).

**Objective 2** - By 2005, develop a method to ensure that County residents have reasonable transportation to and from medical appointments. (Baseline - No plan exists)

### **Action Steps**

- ⇒ By 2002, evaluate all current transportation programs operating in the County, including the Medical Assistance Transportation Program (which provides sedan, wheelchair van, and ambulance service to appointments for Medical Assistance clients), CountyRide (for seniors), MTA (public bus system). Summarize all studies which have addressed transportation barriers in the county.
- ⇒ By 2004, convene a task force of health care and related providers to address the summary findings from the above and prepare report with recommendations.
- ⇒ By 2005, identify agencies responsible for implementation of above recommendations and identify possible sources of funding.
- ⇒ By 2005, convene a multi-agency task force to implement recommendations from the task force.

**Objective 3** - By 2006, develop a plan to address major cultural and language barriers  
(Baseline: No plan exists)

**Action Steps**

- ⇒ By 2002, analyze race and language elements from the 2000 Census.
- ⇒ By 2003, conduct focus groups in areas identified with significant minority or foreign language areas of the county.
- ⇒ By 2003, convene a committee to review results of findings and prepare recommendations.
- ⇒ By 2004, publish report and share findings with other agencies and providers.

**Partial list of Partners**

Baltimore County Dental Association • Baltimore County Health Department • Baltimore County Department of Social Services • Baltimore County Health Council • Baltimore County Medical Association • Baltimore County School System • Greater Baltimore Medical Center • Kaiser Permanente • Maryland Mass Transit Administration • St. Joseph Medical Center

**References**

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Cross-Reference Table for Baltimore County	
See Also	
Access to Health Care .....	24

# CALVERT COUNTY



## Selection of Focus Area

Five focus groups were conducted with broad-based community representation. Preventing teenage pregnancy initially surfaced as a substantial issue, but was considered too controversial for many. Therefore, the scope was broadened to encompass all adolescent health issues.

### Related Focus Issues:

- |              |                      |
|--------------|----------------------|
| 1. Tobacco   | 5. Physical Activity |
| 2. Alcohol   | 6. Violence          |
| 3. Drugs     | 7. Reckless Driving  |
| 4. Nutrition |                      |

### DEMOGRAPHIC OVERVIEW

#### Estimated Population, by Race – 1998

Total .....	71,870
White .....	78.4%
Other .....	21.6%

#### Estimated Population, by Age – 1998

Under 1 .....	920	18-44 .....	29,560
1-4 .....	4,070	45-64 .....	15,150
5-17 .....	15,450	65+ .....	6,720

All causes Mortality Rate (age-adjusted, per 100,000 population) 1996-1998 ..... 446.2

Infant Mortality Rate 1995-1999 ..... 6.3

Estimated Mean Household Income – 1999 ..... \$69,300

Estimated Median Household Income – 1999 ..... \$60,000

Civilian Unemployment Rate, Annual Average – 1999 ..... 2.6

#### Labor force (Top 4) – 1995

State and Local Government .....	2,200	Government (Federal, Military) .....	2,700
Retail Trade .....	4,600	Construction .....	2,500

**Sources:** Maryland Vital Statistics, 1999  
Maryland Department of Planning, 1995, 1998, 1999

## Promoting Adolescent Health

### Definition

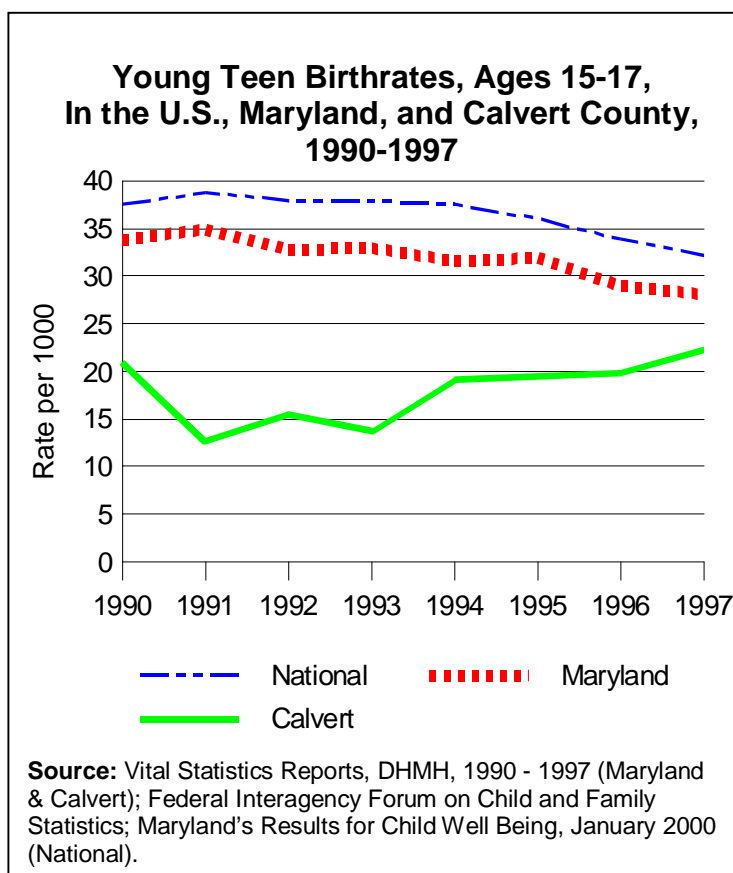
Adolescent Health refers to both the mental and physical well-being of our adolescent population. It is determined by a number of factors, but our focus is social behaviors.

### Problem

In recent years the highest priority of the Calvert County Health Department has been to assure that all children enter school ready to learn. Accordingly, we have emphasized early childhood development and preventive services for preschoolers. In so doing we have neglected adolescent health in spite of the obvious fact that more than ever teens are making choices detrimental to health. We note that in Calvert County the young teen (15 to 17 years) birth rate has increased by 75% from 1991 to 1997, an upward trend that is contrary to the downward trend that characterizes the rest of Maryland and the Nation. In addition, 15% of young female teenagers residing in Calvert County utilized the health department's family planning clinic in FY 99.

The health department is in a position to directly address this sensitive aspect of adolescent behavior. The department has a unique responsibility to act with the aim of reversing these upward trends, to reduce young teen births to a level that at least matches the lowest in our state, as well as to decrease the need for family planning services by this very young population.

The consequences of unintended pregnancies among young teen girls are many and serious for the community and affected families. For the young teen girl, motherhood results in reduced educational and employment opportunities, increased likelihood of welfare dependency, and poorer health and developmental outcomes. Infants born to teenage mothers are more likely to suffer low birth weight, neonatal mortality, and sudden infant death syndrome, and they may be at greater risk for child abuse, neglect, and behavioral and educational problems later in life. Daughters of teenage mothers are 83% more likely to become pregnant while a teenager, thus perpetuating and compounding a societal problem. Ideally, there will be no births to young teenagers in Calvert County.



## Determinants

We believe that promoting healthy choices for all young teenagers and encouraging the avoidance of risky behaviors will clearly benefit all adolescents as well as the entire community. The substitution of long-term goal-directed behavior in place of the impulsive seeking of instant gratification will better prepare teenagers for entry into adulthood. In that vein, abstinence from sexual intercourse is the healthiest choice for all young teens. A birth to a young teen is almost always the result of a pregnancy that is unintended, an unforeseen mishap that in turn results from a complex mix of risky behaviors and unhealthy choices by both young boys and girls. A young teen becoming pregnant is the iceberg tip of a host of underlying health-related behaviors that are problematic for many adolescents, including impulsive acts, alcohol abuse, illicit drug use, bad eating habits, lack of physical activity, violence, reckless driving, and tobacco use. Significant outcome measures of such a redirection of adolescent energies will be a reduction in births to young teens as well as a decrease in the number of young teens seeking family planning services from the health department.

**Objective 1** - By promoting abstinence, reduce the proportion of females aged 15 to 17 who seek our family planning clinic services from 15% in 1999 to 10% by 2010.

**Objective 2** - Reduce the number of pregnancy tests that are positive at the health department among young teens from 56 in 1999 to 42 by 2010.

**Objective 3** - Reduce the percentage of births to adolescents under 18 years of age from 3.4% in 1998 to 1.3% by 2010.

## Action Steps

- ⇒ Target all boys and girls (10-18) for life skills training to include: responsible interpersonal relationships, appropriate behavior, conflict resolution, harm reduction, etc.
- ⇒ Engage community support to implement a data collection survey of youth behaviors in Calvert County.
- ⇒ Promote healthy lifestyle choices for all boys and girls to include nutrition, physical activity, educational priorities, and psycho-social behavior.
- ⇒ Ensure all parents receive information and educational materials regarding family life and child development. Offer programs for parents to enable them to communicate with their children about responsible behaviors.
- ⇒ Collect reports from partnering agencies regarding actions taken and results achieved. Recognize and publicize these efforts. Expand collaboration with additional agencies.

- ⇒ Promote abstinence of sexual intercourse for all adolescents under the age of 18.
- ⇒ Encourage the implementation of after school programs for upper elementary and middle school youth.
- ⇒ Utilize the resources of the Calvert County Coalition on Adolescent Pregnancy Prevention.
- ⇒ Use teenage mothers and fathers as a resource to gather information about adolescent pregnancy issues and to educate other teens about premature parenting.

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## Partners

Calvert County Coalition Adolescent Pregnancy Prevention • Calvert County Department of Social Services • Calvert County Health Department • Calvert County Public Schools • Calvert Crusade for Children • Calvert Memorial Hospital • Covenant Christian Fellowship • League of Women Voters of Calvert County • Maryland Department of Juvenile Justice • Office of Maternal Health & Family Planning, DHMH

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Cross-Reference Table for Calvert County	
See Also	
Child and Adolescent Health .....	33

# CAROLINE COUNTY



## Selection of Focus Area

The Auxiliary Board of Health for Caroline County meets quarterly to discuss and identify problems in the County. This group coordinates actions with other local entities, including the School Health Council.

### DEMOGRAPHIC OVERVIEW

#### Estimated Population, by Race – 1998

Total .....	29,480
White .....	77.5%
Other .....	22.5%

#### Estimated Population, by Age – 1998

Under 1 .....	350	18-44 .....	10,910
1-4 .....	1,670	45-64 .....	6,550
5-17 .....	5,940	65+ .....	4,060

All causes Mortality Rate (age-adjusted, per 100,000 population) 1996-1998 ..... 556.5

Infant Mortality Rate 1995-1999 ..... 15.0

Estimated Mean Household Income – 1999 ..... \$41,200

Estimated Median Household Income – 1999 ..... \$35,800

Civilian Unemployment Rate, Annual Average – 1999 ..... 3.2

#### Labor force (Top 4) – 1995

Retail Trade .....	1.8	Transportation .....	1.3
Manufacturing .....	1.6	Government (Federal, Military) .....	1.3

**Sources:** Maryland Vital Statistics, 1999  
Maryland Department of Planning, 1995, 1998, 1999

## **Control of Sexually Transmitted Diseases (STDs) Among the Adolescent Population of Caroline County**

### **Problem**

Of growing concern is the plight of our teenage population. Sexually Transmitted Disease (STD) rates, especially chlamydia, have increased in Caroline County in recent years. This information prompted the Auxiliary Board of Health for Caroline County to look at this issue as a public health problem for the County.

### **Determinants**

The adolescent propensity for risk-taking behaviors necessarily lends itself to sexual experimentation (although there appears to be a growing trend toward abstinence). This sexual experimentation when coupled with the use of mind-altering chemicals easily leads to situations, which include unprotected sex as well as multiple sex partners. Efforts to address these issues have met with some success; the most effective school-based programs are comprehensive ones, which include an emphasis on abstinence and condom use. However, of the estimated 15 million new cases of STD's identified annually in the United States, approximately 4 million occur in the adolescent population.

Chlamydia is a newly emergent bacterial STD that attacks the middle school, high school and early college age group almost exclusively. Fifty percent of infected males have some urinary tract symptoms; females are usually asymptomatic. It is easily diagnosed by the non-invasive Ligase Chain-Reaction (LCR) urine test and easily treated with a single dose of Zithromax (concomitant gonorrhea responds to a single dose of Suprax). Chlamydia can cause long-term complications, like gonorrhea, but its presence also indicates that its victims are having unprotected sex, thereby inviting the spread of HIV in that vulnerable population.

Chlamydia rates throughout Maryland have risen from 160.8 (per 100,000 population) in 1996 to 173.8 in 1998, according to data from the Maryland Electronic Reporting and Surveillance System (MERSS). Caroline County had an attack rate of 297.5 per 100,00 (86 cases) during FY1998. This rate is above the State rate of 261.0. Caroline County ranks seventh in Chlamydia rates, according to Health Office data (Health Office Memo. 99-039).

We have recently dealt with an epidemic in Kent, Queen Anne's, and Caroline counties involving at least 60 high school age males and females. One female in Caroline County named 33 contacts, a Kent County female named 19, and a Queen Anne's County female named 11. It was evident that contact was made between the three groups.



**Objective 1 -** By 2010 establish an efficient clinical system to diagnose, treat, and prevent chlamydia and gonorrhea infection in 80% of the high school population. (Baseline: 40%)

**Action steps**

- ⇒ Meet with local officials to establish a clinical system to diagnose chlamydia.
- ⇒ Determine the process for obtaining supplies for appropriate urine testing and procedure for mailing to the lab.

**Objective 2 -** By 2010, the rates of Chlamydia will not be more than 2% of the adolescent population. (Baseline: a peak rate of 20% is expected in the first year, reduced to 5% by the end of the third year and staying 2%, thereafter).

**Action steps**

- ⇒ Educate diagnosed cases to the dangers of unprotected sex.
- ⇒ Meet with the Board of Education and Auxiliary Board of Health to develop the content and design of the Epidemic Pamphlet defining “sexual activity” and chlamydia problems.
- ⇒ Provide pamphlet in health suites and libraries in middle and high schools.

**Objective 3 -** By 2010 a system will be in place to introduce the Epidemic Pamphlet to 100% of ninth grade health classes and seventh grade Family Life classes. (Baseline: 0)

**Action steps**

- ⇒ Provide in-service training to all teachers and guidance counselors who deal with this topic.
- ⇒ Have a community forum to discuss this issue and educate parents on the problems of the STD epidemic.
- ⇒ Repeat yearly to school staff, pregnancy prevention counselors, adolescent case managers, etc.

**Objective 4** - By 2010, diagnostic urine testing will be given as a routine part of every sports physical and other adolescent examination. (Baseline: 100)

### **Action steps**

- ⇒ Provide diagnostic urine test kits to all health suites in the middle and high schools in the county.
  - ⇒ Meet with the private physicians to encourage them to give the appropriate diagnostic urine test to all adolescents in their practice.
  - ⇒ Provide diagnostic urine testing kits to all private physicians in the County.
  - ⇒ Educate nurses and private physicians in the need to report positive test results for treatment and contact tracing.
- 

### **Partners**

Caroline County Auxiliary Board of Health • Caroline County Board of Education • Caroline County Health Department • Caroline County Local Management Board

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### Cross-Reference Table for Caroline County

See Also

Child and Adolescent Health .....	33
HIV .....	65
Sexually Transmitted Diseases .....	126

# CARROLL COUNTY

## Selection of Focus Area

In 1996, the Carroll County Health Department (CCHD), Carroll County General Hospital and a 50-member Citizen Advisory Forum formed a collaborative effort, the Partnership for a Healthier Carroll County. One of the first steps in the process was to complete a Community Health Assessment Project which included a secondary data assessment, focus groups, a household survey, and a provider survey. This process identified eight priority areas for the Partnership. The priorities were preventive health and wellness, access, cancer, domestic and interpersonal violence, elder health, heart disease, mental health, and substance abuse. An additional process was initiated to look at priorities within the health department. A local health plan/health improvement plan team was formed. Using both the external and internal process results, a local health plan was developed for CCHD. The local health plan focuses on all current priorities and the Health Improvement Plan (HIP) modules focus on expanded priorities. The top three HIP priorities identified were access, substance abuse, and oral health.



### DEMOGRAPHIC OVERVIEW

#### Estimated Population, by Race – 1998

Total .....	149,700
White .....	95.9%
Other .....	4.1%

#### Estimated Population, by Age – 1998

Under 1 .....	1,860	18-44 .....	60,780
1-4 .....	8,170	45-64 .....	32,760
5-17 .....	30,480	65+ .....	15,650

All causes Mortality Rate (age-adjusted, per 100,000 population) 1996-1998 ..... 426.7

Infant Mortality Rate 1995-1995 ..... 5.9

Estimated Mean Household Income – 1999 ..... \$69,000

Estimated Median Household Income – 1999 ..... \$60,100

Civilian Unemployment Rate, Annual Average – 1999 ..... 2.5

#### Labor force (Top 4) – 1995

Services .....	15,600	Construction .....	7,000
Retail Trade .....	11,000	Government (Federal, Military) .....	6,800

**Sources:** Maryland Vital Statistics, 1999  
Maryland Department of Planning, 1995, 1998, 1999

## **Focus Area 1 - Assuring Access to Quality Health Services**

### **Problem**

Over the past two decades, major changes have occurred in the health care delivery system that have impacted health care quality and access. State and local governments have a role in insuring access to quality health care for all vulnerable and at risk populations. In addition to the uninsured, an unknown number of the insured population lack access to some parts of the health care delivery system. Improving access requires addressing barriers at the level of client, provider, and systems of care. Clients lack knowledge and financial resources. Providers have a lack of time and tracking systems. There is a lack of resources to identify persons at risk and then provide outreach to these clients. Access to the continuum of long-term care services continues to be a problem because of financial barriers and limited availability of specific services.

### **Determinants**

Access barriers include location and hours of services, transportation, continuity of care, managed care systems, lack of insurance, and underinsurance. As of 1996, 12% of the population was considered to be uninsured, which represents 18,000 persons (Maryland Consensus Set of Health Indicators, 1998). Those more likely to lack health insurance continue to include young adults in the 18 to 24 year-old age group. Two-thirds of uninsured non-elderly adults have jobs, but the self-employed are at greater risk of lacking insurance. The uninsured are less healthy and less likely to obtain preventive health services.

In Carroll County, there have been access problems documented in the following areas: primary health care, dental, mental health, addictions, medications, and subacute and periodic home services for long-term care.

Access is also a problem for those residents with insurance. The 1996 Community Health Assessment Project, completed by the Partnership for a Healthier Carroll County included a household survey with 585 responses. Of those respondents, 22.4% indicated not being able to get needed health care, and cited reasons of which 10.9% were financial barriers, including under insurance, copays, and high deductibles. Of the remaining reasons, 11.5% were additional barriers such as "health is not a priority," doctors won't take their insurance, work schedules, lack of trust of the medical community, and distance from health services. In the survey, 9.7% had one barrier, 4.4% had two barriers, and 2.5% had three or more barriers.

**Objective 1-** By 2010, create a surveillance system to measure unmet health care needs in Carroll County.

### **Action Steps**

- ⇒ Develop a system to collect county-specific data on access issues.
- ⇒ Repeat Community Health Assessment household survey of Carroll County residents.
- ⇒ Identify gaps in service delivery.

**Objective 2 -** Reduce the proportion of individuals/families in Carroll County who report that they do not obtain all of the health care that they need from 22.4% in 1996 to lower than 15% in 2010.

### **Action Steps**

- ⇒ Prioritize areas of unmet needs.
  - ⇒ Establish strategies to overcome barriers and unmet needs.
- 

## **Partners**

Carroll County Bureau on Aging • Carroll County Department of Social Services • Carroll County health care providers • Carroll County Health Department • Carroll County Public School System • Partnership for a Healthier Carroll County

## **Related Reports**

Carroll County Bureau of Planning, Comprehensive Planning Department. (1999, July). *Carroll County demographic and development data manual*. County manual.

Maryland Health Care Commission. (1999, October). *Health insurance coverage in Maryland adults: Demographic health status and access to care differences*.

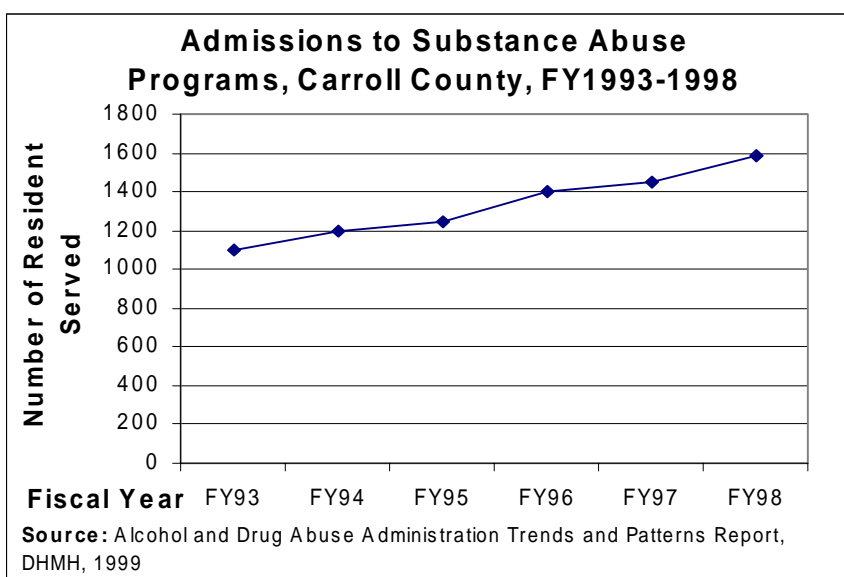
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*Public Health Reports*, 114. (1999, November/ December).

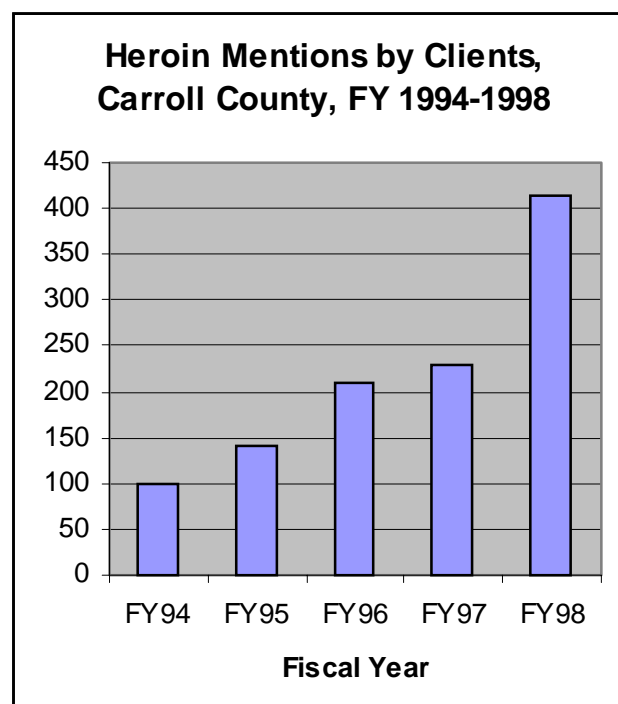
## Focus Area 2 - Reduction of Substance Abuse

### Problem

According to the State of Maryland's 1999 Trends and Patterns of Substance Use, published by the Department of Health and Mental Hygiene Alcohol and Drug Abuse Administration (ADAA), admissions to treatment programs overall in Maryland have fallen over the past three fiscal years. In comparison, the admissions to methadone maintenance facilities have increased by 40% over the last three years. This may be directly attributed to the increase in heroin use throughout the state. Statistics for Carroll County residents in outpatient and residential substance abuse treatment for 1999 year show a decrease in the average age of the person applying for treatment and an increase in illicit drugs as the reason for admission to the programs.



The 1999 ADAA report shows significant increases in the number of mentions of illicit drug use over the last five years. The data show a slight decrease over the last three years in alcohol use. Data collected at the Shoemaker Center on admissions of Carroll County residents show a 72% increase in mentions of marijuana use upon admission. Cocaine mentions have also increased by 70% for Carroll County residents. Probably the most alarming statistic is the increase of 432% in the number of mentions of heroin use among Carroll County residents since FY1994. Although most users begin by using this drug intra-nasally, statistics continue to show the number one method of use is intravenous injection. This raises concern over the other health risks involved in the intravenous injection of illicit substances. These are HIV/AIDS, Hepatitis, endocarditis, blood infections, and a host of other medical conditions.



**Source:** Alcohol and Drug Abuse Administration Trends and Patterns Report, DHMH, 1999

## Determinants

There are gaps in the substance abuse treatment services available to the residents of Carroll County. For instance, the County lacks proper and adequate detoxification services. Many residents of the County leave and travel to other counties or to Baltimore City in an effort to receive detoxification services. Consequently, clients with multiple challenges are forced to go back and forth to numerous providers in order to meet their treatment schedules. Ideally, clients should be able to access a local provider to meet all of their needs.

Another gap in the substance abuse continuum of care is the lack of a methadone clinic as a treatment alternative for the increasing numbers of heroin dependent individuals residing in the County. Adequate integrated services for individuals with both a substance abuse disorder and a mental health disorder are nonexistent. In addition, long-term care is sorely needed to address the ever-growing heroin addicted population between the ages of 18 and 25. This population is extremely difficult to treat as they very frequently leave against medical advice during the detoxification phase. When incarcerated, clients often immediately return to heroin abuse after leaving the criminal justice system.

**Objective 1-** To increase by 20% the number of clients receiving treatment for illicit drugs in the general population from 1,597 in FY1998 to 1,897 in FY2010.

**Objective 2 -** By 2010, increase the number of communities using partnerships or coalition models to conduct comprehensive substance abuse prevention efforts from the existing one to three community efforts.

## Action Steps

- ⇒ Develop a system to investigate and identify gaps in community treatment.
- ⇒ Identify resources to increase the availability and accessibility of treatment.
- ⇒ Provide a proper continuum of substance abuse services.
- ⇒ Increase public awareness and acceptance for substance abuse services.

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## Partners

Alcohol and Drug Abuse Administration, DHMH • Carroll County Health Department • Drug Early Warning Systems (DEWS) • Criminal Justice, Substance Abuse, and Mental Health Coalitions

## Related Reports

Alcohol and Drug Abuse Administration. *Trends and patterns report*.  
Maryland State Task Force for Increasing the Availability of Substance Abuse Treatment. *Interim report*.  
*Maryland Drug Scan Report: Current Trends in Drug Use*. (1999).  
Carroll County General Hospital. *ER statistics*. Program Statistics.



## **Focus Area 3 - Improving Access to Oral Health Services**

### **Problem**

Children in Maryland do not receive dental services to the same degree as children nationwide, particularly fillings and sealants, according to the Survey of the Oral Health Status of Maryland School Children, 1994-1995, published by the University of Maryland Dental School. The report shows that Maryland children have a 55% untreated decay rate compared to the national average of 21%. Maryland school children with decay is 60% compared to a national average of 50%. Children who are eligible for Medicaid, or Free/Reduced Lunch programs have over 30% more cavities than the State average. The recent increase in fees paid to dental providers who accept Medicaid clients has not increased access in Carroll County, and residents have encountered additional problems seeking dental care through the managed care organizations.

The Survey of the Oral Health Status of Maryland School Children, 1994-1995 revealed that children without fluoridated water have 50% more decayed teeth than children living with fluoridated water. Of the 11 County water systems, only four add fluoride. This leaves 21% of the residents on community water supplies without fluoride. Of all Carroll County residents (private wells and community water supplies), only 39% are on fluoridated water according to the County's 1999 Environmental Health Survey. Ten elementary schools and two middle schools on non-fluoridated water supplies participate in school-based fluoride mouth rinse programs.

### **Determinants**

The Carroll County Dental Access Program was developed in 1987 by the Health Department to coordinate reduced-fee dental care to "gray area" youth and elderly residents. The program's existence depends upon the participation of private dentists who voluntarily reduce fees with no subsidy. Historically, referrals have been generated by the Bureau of Aging, Board of Education, and Health Department clinics. If this program were advertised, the dentists could not handle the number of referrals. This program does not serve 22- to 60-year-olds who have no local access to reduced-fee dental care. Clients are often referred to the University of Maryland Dental School in Baltimore, where a 30-50% reduction in fees is provided. Even if able to pay, lack of transportation to Baltimore is a common complaint.

Mission of Mercy Van (a charitable organization) treats dental clients every Wednesday in Westminster, but they are limited to a maximum of 16 dental patients weekly. With Westminster being their busiest site, there are as many as 30 patients waiting to be seen on any given Wednesday. In 1998, they provided 482 dental procedures in Westminster utilizing one dental chair manned by one dentist. Mission of Mercy clients are not the homeless and destitute, but rather the average uninsured/underinsured working lower to middle class resident.

People often seek relief from dental pain at the Carroll County General Hospital Emergency Room. Once there, abscessed teeth are generally treated with an antibiotic and the patient is told to seek dental care. Unfortunately, there is often nowhere for them to go. In calendar year 1999, the Carroll County Health Department paid private dentists in the community to render dental emergency care to 40 uninsured low-income clients. Because of limited funding, emergencies were limited to “relieving dental pain associated with abscessed or broken teeth.” The most common treatment is extractions.

**Objective 1** - By 2010, reduce the proportion of school age children in Carroll County with dental caries to 25%. (Baseline: 60% for Maryland, 1996)

**Objective 2** - By 2010, 50% of Carroll County children will have received dental sealants on their molar teeth. (Baseline: 20% for Maryland, 1996)

**Objective 3** - By 2010, increase to 90% the proportion of the population served by community water systems with optimally fluoridated water. (Baseline: 79% for Carroll County, 1999)

### **Action Steps**

- ⇒ Increase the public health capacity for oral health services where the private sector is not fulfilling current needs among the uninsured and underinsured.
- ⇒ Increase public awareness through dental education.
- ⇒ Increase school-based and/or school-linked oral health services.
- ⇒ Form more partnerships between the private and public dental health sector.
- ⇒ Increase advocacy and education for fluoridated water.
- ⇒ Provide dental sealants to school age children, especially those who are considered disadvantaged.

Partners

Carroll County Dental providers • Carroll County Dental Society • Carroll County Health Department • Carroll County Public Schools • Community Water Treatment Facilities • Mission of Mercy • University of Maryland Dental School

Related Reports

Poole, Jill. (1986). *Dental health steering committee report*.  
U.S. Department of Health and Human Services. (2000, January). Oral health: Summary of Objectives. In *Healthy People 2010*. Washington, DC: U.S. Department of Health and Human Services, U.S. Government Printing Office.  
University of Maryland Dental School. (1995). *Survey of the oral health status of Maryland school children, 1994-1995*.  
Chason, Dr. Jay; Sanidad, Dr. Orlando; Mission of Mercy. (2000). *Oral health survey*.

Cross-Reference Table for Carroll County	
See Also	
Access to Health Care .....	24
Substance Abuse .....	132
Oral Health .....	107

# CECIL COUNTY



## Selection of Focus Area

The Cecil County Community Health Advisory Committee, formed in 1995 with members from agencies, businesses, and the community, chose heart disease and cancer as health priorities because they were the two leading medical causes of death in Cecil County. With additional community members, task forces for both health problems were formed to develop and implement health plans to decrease these problems. In 2000, the Cecil County Community Health Advisory Committee again chose cancer and heart disease as priorities, because, although mortality rates had diminished, they continued to be the two leading medical causes of death and also the two leading causes of Years of Potential Life Lost (YPLL). The Cancer Task Force noted that lung cancer and breast cancer were major contributors to the cancer mortality rate, and chose to concentrate on these two cancers. Decreasing these diseases with lifestyle changes is a long-term process. Prevention and early intervention can be successful. The Cecil County Community Health Advisory Committee hopes to make a difference in the County.

### DEMOGRAPHIC OVERVIEW

#### Estimated Population, by Race – 1998

Total .....	82,520
White .....	93.3%
Other .....	6.7%

#### Estimated Population, by Age – 1998

Under 1 .....	1,080	18-44 .....	32,770
1-4 .....	4,560	45-64 .....	17,930
5-17 .....	17,460	65+ .....	8,720

All causes Mortality Rate (age-adjusted, per 100,000 population) 1996-1998 ..... 522.8

Infant Mortality Rate 1995-1999 ..... 8.0

Estimated Mean Household Income – 1999 ..... \$60,200

Estimated Median Household Income – 1999 ..... \$51,600

Civilian Unemployment Rate, Annual Average – 1999 ..... 4.6

#### Labor force (Top 4) – 1995

Services .....	6,600	Government (Federal, Military) .....	4,800
Retail Trade .....	5,600	Manufacturing; State & Local (tied) .....	2,800

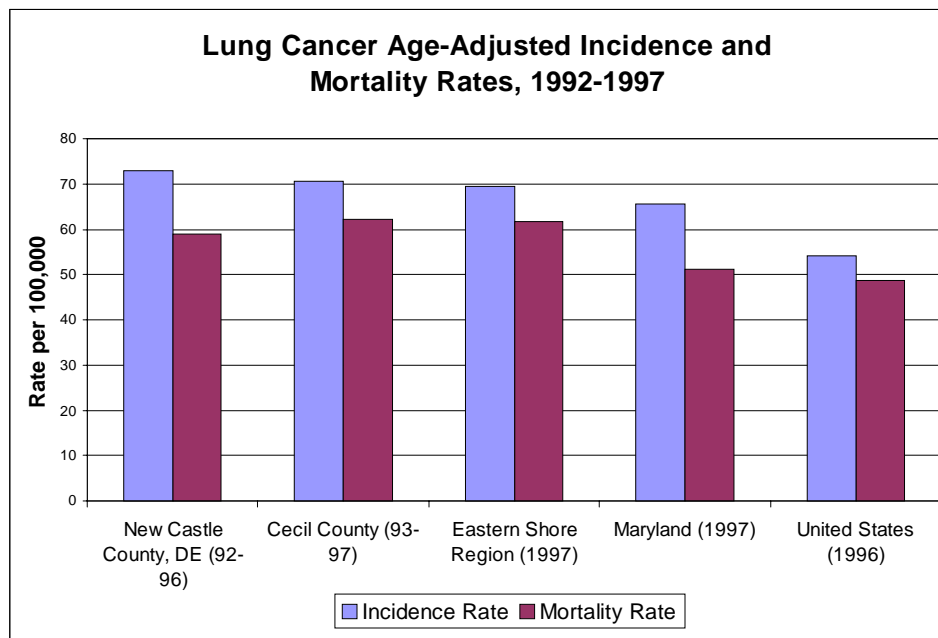
**Sources:** Maryland Vital Statistics, 1999  
Maryland Department of Planning, 1995, 1998, 1999

## Focus Area 1 - Lung Cancer

### Problem

Lung cancer is the leading cause of cancer death and the second most common type of cancer in Cecil County in both men and women. Between 1993 and 1997, 272 deaths and 285 new cases were reported, an average of four deaths and five new cases every month. Lung cancer represented only 18.6% of all new cancer cases but 34.8% of all cancer deaths.

Cecil County incidence and mortality rates (70.6 per 100,000 and 62.2 per 100,000) are higher than the Maryland rates (65.5 and 51.3) and the United States rates (54.2 and 48.8). Cecil County rates however, are not significantly different from neighboring New Castle County, Delaware, rates (73.0 and 58.9) and the Eastern Shore rates (69.5 and 61.8).



Sources: Maryland Cancer Registry; Delaware Health and Social Services, Cancer Data

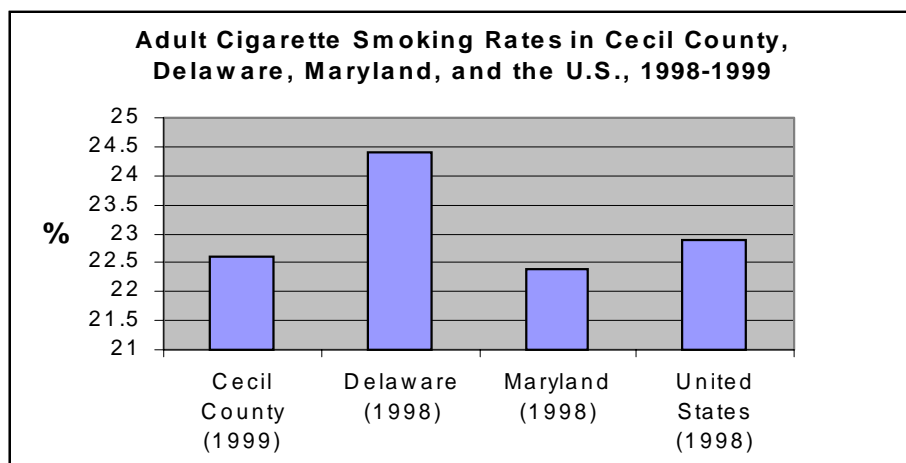
### Determinants

According to the Centers for Disease Control and Prevention (CDC), tobacco use is the single most preventable cause of death and disease in our society. CDC research indicates that 68-78% of lung cancer deaths among females and 88-91% of lung cancer deaths among males are related to smoking tobacco [MMWR 42 (33), 645-649, 1993].

The Cecil County Community Health Survey (1999) revealed that 22.6% of Cecil County adult residents were current smokers (about 18,000 residents age 18 and over). This rate is similar to the 1998 Maryland and United States rates of 22.4% and 22.9% respectively. There was no statistically significant difference in prevalence between males (22.5%) and females (22.8%), but nonwhites (27.0%) were more likely to smoke than whites (22.5%). The highest rates were among young adults aged 18 to 24 (37.7%). The lowest rates of smoking were among residents 65 years of age and over (10.6%), those with four or more years of college education (11.7%) and those with higher income. Residents with a household income of \$75,000 or more had a smoking rate of 17.5%.

The focus of local efforts is to improve the health of Cecil County residents by reducing the

incidence and mortality of lung cancer. The primary measure will be to reduce the prevalence of smoking among adults and to prevent teens from starting to smoke. The task force will work with community members to design and implement prevention programs specific to high-risk groups.



**Sources:** Behavioral Risk Factor Surveillance System (1998); Cecil County

**Objective 1** - By the year 2010, decrease the number of current smokers to 18%. (Baseline: 22.6%; Cecil County Community Health Survey, 1999)

**Objective 2** - By the year 2010, increase the number of current adult smokers who have tried to quit smoking to 25%. (Baseline: 16.4%; Cecil County Community Health Survey, 1999)

**Objective 3** - By the year 2010, decrease the smoking rates of nonwhites to 24%. (Baseline: 27%; Cecil County Community Health Survey, 1999)

## Action Steps

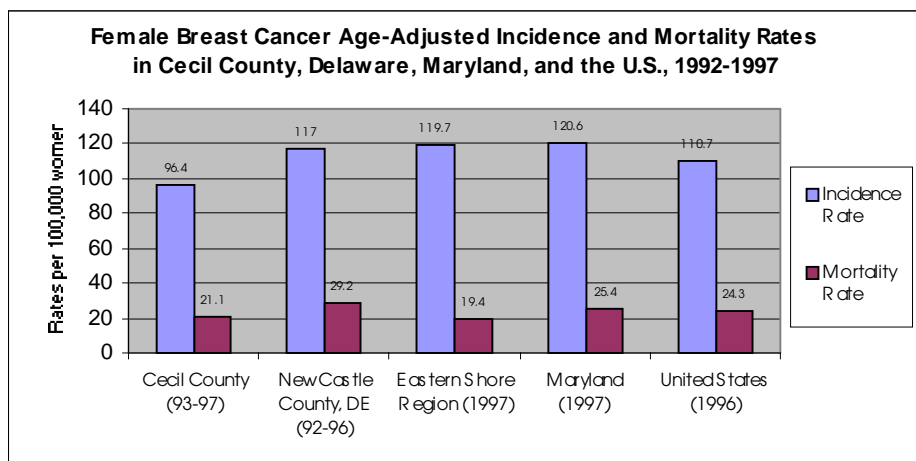
- ⇒ Provide accessible tobacco cessation services employing new treatment modalities.
- ⇒ Increase awareness of the risk factors of tobacco use and the stages of change to maintaining a smoke-free lifestyle.
- ⇒ Expand educational strategies to reach tobacco users in various community settings.
- ⇒ Initiate a tobacco cessation media campaign in the county.
- ⇒ Promote local businesses to provide incentives for their employees to be educated about tobacco use prevention and tobacco cessation services.
- ⇒ Partner with the African-American religious community to provide activities to address nonwhite smoking rates.

## Focus Area 2 - Female Breast Cancer

### Problem

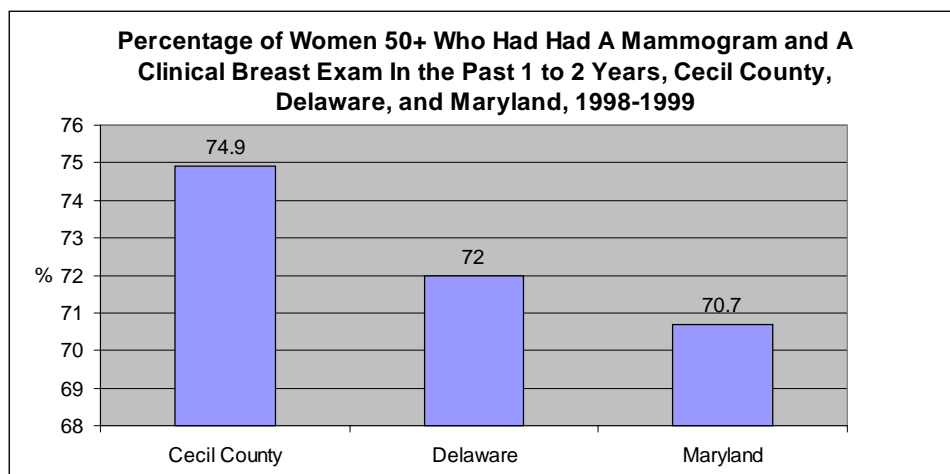
Among Cecil County women, breast cancer is the second leading cause of cancer death and the most frequently diagnosed type of cancer. For the five year period 1993-1997, 50 women died of breast cancer and 209 new cases were diagnosed. This is an average of 42 new cases and 10 deaths every year. The overall mortality rate is 21.1 per 100,000 women.

Breast cancer is more common among white women than nonwhite women; however, non-white women have a slightly higher mortality rate (24.5 per 100,000 versus 21.0 ). For 65% of white women, cancer is diagnosed at an early stage with the disease confined to the breast, and for 3.5% the cancer has spread to distant tissues or organs. Only 30.4% of nonwhite women had the cancer diagnosed at an early stage and 28% were diagnosed at a late stage. The earlier the stage of the cancer at the time of diagnosis, the better the chances of survival.



**Sources:** Maryland Cancer Registry; Delaware Health and Social Services, Cancer Data

The Cecil County mortality rate of 21.1 per 100,000 women was lower than the rates for Maryland (25.4) and the United States (24.3). The incidence rate also was lower for Cecil County (96.4) than for Maryland (120.6) and the United States (110.7). Cecil County has lower incidence but similar mortality rates to the Eastern Shore region (119.7 and 19.4). Neighboring New Castle County, Delaware, has higher incidence and mortality rates (117 and 29.2) than Cecil County.



**Sources:** Behavioral Risk Factor Surveillance System (1998); Cecil County Community Health Survey (1999), Cecil County Health Department

## Determinants

Regular clinical breast exams combined with a mammogram help to detect most cases of breast cancer at an early stage and increase the chances of survival. The 1999 Cecil County Community Health Survey revealed that 74.9% of women 50 and over in Cecil County had had a mammogram and clinical breast exam compared to 70.7% in Maryland (BRFSS, 1998).

New guidelines suggest that women have a baseline mammogram as early as 35 years of age and a yearly mammogram from age 40. This same survey also indicated that 85.6% of women age 40 and older had ever had a mammogram (87.5% for whites and 60.7% nonwhites) but only 55% had the exam in the past year. The rates increased with education and income.

**Objective 1** - By the year 2010, 70% of women 40 and older will have an annual mammogram. (Baseline: 54.9% of women 40 years and older had had a mammogram in the past year; Cecil County Community Health Survey, 1999)

**Objective 2** - By the year 2010, 70% of women 40 years and older will have an annual clinical breast exam. (Baseline: 58% of women 40 years and older had a clinical breast exam in the past year; Cecil County Community Health Survey, 1999)

**Objective 3** - By the year 2010, 90% of women 50 years and older will have a mammogram and a clinical breast exam in the past two years. (Baseline: 74.9%; Cecil County Community Health Survey, 1999)

**Objective 4** - By the year 2010, decrease the breast cancer mortality rate for nonwhite women to 20.0 per 100,000. (Baseline: 24.5 per 100,000; CDC Mortality Data, 1993-1997)

## Action Steps

- ⇒ Provide updated educational materials for the public school curricula in family life and personal health education about breast cancer risk factors and the importance of early detection of breast cancer.
- ⇒ Increase public awareness of breast cancer screening services and locations in the county for women 40 years and older.
- ⇒ Increase awareness about breast cancer risk factors and the importance of early detection of breast cancer by holding two community activities each year.
- ⇒ Assess and address causes of delayed diagnosis in minority women.
- ⇒ Assess barriers to health care services and address identified barriers.
- ⇒ Support awareness of available transportation services in the county.



## Focus Area 3 - Heart Disease and Stroke

### Problem

Heart disease, the leading cause of death in Cecil County accounted for 32% of all deaths between 1993 and 1997. Coronary heart disease, with modifiable risk factors such as high blood pressure, obesity, physical inactivity, and cigarette smoking, represents 83% of heart disease deaths.

There has been a 9.5% decrease in the mortality rate of coronary heart disease in Cecil County since the beginning of this decade, when the rate was 137.3 deaths per 100,000 population (1989-1993). The current mortality rate is 124.3 (1993-1997), which is still higher than the 1997 Maryland and United States rates (100.1 and 104.7 respectively). Heart disease is the second leading cause of years of potential life lost (YPLL) in Cecil County, after cancer and accidents. The younger the person at the time of death, the more years of potential life lost

The mortality rate of Cerebrovascular disease (stroke) in Cecil County decreased 10.3% from the rate of 25.3 per 100,000 in 1989-1993 to the current rate of 22.7 (1993-1997). This rate is favorable compared to the 1997 Maryland and United States rates (25.2 and 25.9, respectively).

### Determinants

The relatively higher mortality rate of heart disease correlates with higher rates of certain risk factors as determined by the CDC's Behavioral Risk Factor Surveillance System (BRFSS) and the Cecil County Community Health Survey.

- High blood pressure is one of the major and modifiable risk factors for heart disease. Of Cecil County adult residents, 28.6% reported having high blood pressure compared to 23.8% for Maryland and 23.0% for the nation. Males have higher rates than females.
- High blood cholesterol also is more prevalent in Cecil County (31.9%) than Maryland (28.6%) and the United States (28.8%). Actions to lower high blood cholesterol levels and high blood pressure are very effective in decreasing someone's risk for heart disease.
- Of Cecil County adults, 23.3% are obese (as determined by a body mass index of 30 or above). This is above the rates for Maryland (19.8%) and the nation (17.9%).
- Only 24% of adult residents have regular, sustained physical activity (physical activity lasting 20 minutes or more, at least 3 times per week). This rate is identical to the Maryland rate of 25% and favorable to the United States rate of 20.4%.
- In Cecil County, 25.6% of the adult population under 65 are current smokers compared to 23.8% in Maryland. For the population 65 and older, Cecil County has a lower smoking rate than Maryland (10.6% and 14.1%, respectively).
- The prevalence rate of diabetes, another significant risk factor for coronary heart disease, is higher for Cecil County (6.9%) than Maryland (5.4%) or the United States (5.4%).

**Objective 1** - Reduce coronary heart disease mortality rate to no more than 100.0 per 100,000 population by the year 2010. (Baseline: 124.3 per 100,000; CDC Mortality Data, 1993-1997)

**Objective 2** - Reduce stroke mortality rate to no more than 15.0 per 100,000 population by the year 2010. (Baseline: 22.7 per 100,000; CDC Mortality Data, 1993-1997)

**Objective 3** - Increase the proportion of adults who engage in regular and sustained physical activity to at least 40% by the year 2005. (Baseline: 24%; Cecil County Community Health Survey, 1999)

**Objective 4** - Increase to 99% the proportion of adults who have their blood pressure checked within the preceding two years. (Baseline: 96.8%; Cecil County Community Health Survey, 1999)

**Objective 5** - Increase to 99% the proportion of adults who have their blood cholesterol checked within the preceding five years. (Baseline: 95.1%; Cecil County Community Health Survey, 1999)

**Objective 6** - Increase the number of workplaces that offer or sponsor physical activity programs in the county. (Baseline: to be determined)

HYPERTENSION/ CHOLESTEROL/ DIABETES	CECIL COUNTY 1999 %	MARYLAND 1997 BRFSS %	U.S. 1997 BRFSS %	U.S. HEALTHY PEOPLE 2000 GOAL
Blood pressure checked within the past 5 years	98.3	98.2	97.2	75.0
Have high blood pressure	28.6	23.8	23.0	N/A
Cholesterol checked within the past 5 years	95.1	96.5	92.7	75.0
Have high blood cholesterol	31.9	28.6	28.8	N/A
Diabetes Prevalence	6.9	5.4	5.4	2.5

**Sources:** Cecil County data are from the Cecil County Community Health Survey, 1999; data for Maryland and the United States are from the Behavior Risk Factor Surveillance System (BRFSS), 1997 and 1998.

## Action Steps

- ⇒ Assess current worksites, physical activity and wellness programs. Conduct a survey of agencies and businesses (with 50 or more employees) to determine what programs they have and what their needs might be.
- ⇒ Develop a plan to help businesses, organizations, and agencies implement or sponsor a physical activity program for their employees. Employers could also be encouraged to give their employees incentives to participate in a program.
- ⇒ Increase community awareness of heart disease and stroke risk factors. Conduct educational campaigns in schools, churches, worksites, and during community activities.
- ⇒ Encourage screening and treatment of high blood pressure, high blood cholesterol, and diabetes.
- ⇒ Conduct media campaigns to encourage eating five or more fruit and vegetable servings per day.
- ⇒ In collaboration with the cancer task force, develop and implement activities to decrease cigarette smoking rates.

The Cecil County Cancer Task Force, one of the seven task forces of the Cecil County Community Health Advisory Committee, developed this Health Improvement Plan and will implement these action steps. The Cecil County Health Department serves as the resource agency to the Task Force, which is composed of the partners listed below as well as other agencies, organizations, businesses, and private citizens in Cecil County.

## Partners (for all three Cecil County modules)

American Cancer Society • Cecil Community College • Cecil County Board of Health • Cecil County Department of Aging • Cecil County Health Department • Cecil County physicians, churches, businesses, and private citizens • Cecil County Public Schools • Department of Social Services • HELP Center • Northern Chesapeake Hospice • Union Hospital of Cecil County

### Cross-Reference Table for Cecil County

*See Also*

Cancer .....	30
Heart Disease and Stroke .....	60

# CHARLES COUNTY

## Selection of Focus Area

In 1995, the Partnership for a Healthier Charles County was formed to identify the community's health problems and to find solutions using input from citizens, providers, agencies and other concerned individuals. To accomplish this goal, a community-wide needs assessment was completed in 1995 using the Planned Approach to Community Health (PATCH) process. Seven core priorities were determined: Cardiovascular Disease, Cancer, Motor Vehicle Crashes, Special Populations (including the mentally and physically challenged and HIV/AIDS individuals), Substance Abuse, Mental Health, and Violence.



Another community needs assessment was completed in 2000. This reinforced that many of the problems identified in 1995 still remain issues that our community must address along with access to care, public/provider health education, and service development issues. Additionally, it became clear that there was another pressing problem that needed immediate attention and review: the infant mortality rate for Charles County had risen to place Charles County second in the State. This problem became the focus of the Health Improvement Plan.

### DEMOGRAPHIC OVERVIEW

#### Estimated Population, by Race – 1998

Total .....	117,920
White .....	74.0%
Other .....	26.0%

#### Estimated Population, by Age – 1998

Under 1 .....	1,660	18-44 .....	50,150
1-4 .....	7,210	45-64 .....	23,730
5-17 .....	26,360	65+ .....	8,850

All causes Mortality Rate (age-adjusted, per 100,000 population) 1996-1998 ..... 527.7

Infant Mortality Rate 1995-1999 ..... 7.3

Estimated Mean Household Income – 1999 ..... \$68,500

Estimated Median Household Income – 1999 ..... \$60,600

Civilian Unemployment Rate, Annual Average – 1999 ..... 2.5

#### Labor force (Top 4) – 1995

Retail Trade .....	12,300	Government (Federal, Military) .....	8,300
Services .....	12,100	State & Local Government .....	4,500

**Sources:** Maryland Vital Statistics, 1999  
Maryland Department of Planning, 1995, 1998, 1999

## **Maternal and Infant Health**

### **Problem**

In 1913, Julia Lathrop, of the Children's Bureau (a federal child advocacy organization), stated, "Infant mortality is the most sensitive index we possess of social welfare." This continues to be true today. The infant mortality rate serves as a measure of a community's social and economic well-being as well as its overall health. It is also a measure of the organization and delivery of a community's health and human services resources. Within Charles County, the infant mortality rate had for a number of years remained stable, with slight fluctuations. However, in FY1997, we began to see an increase, especially among the African-American population. Then, in FY1998, there was a dramatic increase that was identified by the County's Fetal Infant Mortality Review (FIMR) committee. FIMR is a community-based, action-oriented process that leads to improvement in health and other family services. When the FIMR Committee began to look for common issues in these infant deaths, it found that many of the women giving birth had preexisting health conditions, which in many cases led to infant deaths due to prematurity. At the same time, the Health Department began a review of the same issue with an in-house team composed of the Health Officer, Deputy Health Officer, Improved Pregnancy Outcomes (IPO) Coordinator, Director of Community Health and Prevention, and the Epidemiologist. The problem of a high infant mortality rate and the need for pre-conceptual health education was identified again as an issue needing to be addressed by the community needs assessment session with the Partnerships for a Healthier Charles County. Along with these three groups, the Healthy Maryland 2010 Initial Steering Committee for Southern Maryland analyzed the morbidity, mortality, and behavioral trends and rates for the region. Infant mortality and no prenatal care were listed as high priority health concerns for Charles County.

### **Determinants**

The Maryland Partnership for Children, Youth and Families (MPCYF) notes that a variety of factors influence mortality: maternal health, quality and access to medical care, socio-economic factors, psychosocial factors, and public health practices. Also, MPCYF notes that low birth weight is the primary cause of infant mortality and that low birth weight babies have a high probability of experiencing developmental delays.

In 1999, the March of Dimes reported that low birth weight affects one in every 14 babies born each year in the United States and is related to 60% of infant deaths. The March of Dimes also notes that socio-economic factors such as low income and lack of education are associated with increased risk of having a low birth weight baby, although the underlying reasons are not understood. The more common occurrence of bacterial infection of the lower reproductive tract appears to explain some of this increased risk since low-income mothers may be unable to afford proper healthcare and nutrition. Women under age 17 and over age 35, unmarried mothers and women who have had several children quickly are at increased risk of having low birth weight babies. Teenagers may not practice good health habits. Women who experience excessive stress and other social, economic and psychological problems and victims of domestic violence are at increased risk of having a low birth weight baby.

The National Clearinghouse for Alcohol and Drug Information reports that the use of alcohol, tobacco and/or other drugs during pregnancy continues to be a leading preventable cause of mental, physical, and psychological impairments and problems in infants and children. According to a recent National Institute on Drug Abuse study estimating the use of selected substances during pregnancy: 5.5% of women surveyed reported using illicit drugs during pregnancy; 18.8% of women surveyed reported using alcohol during pregnancy; and 20.4% of women surveyed reported using tobacco during pregnancy. This study concluded that the cost of alcohol, tobacco, and other drugs during pregnancy is high to society in both human and economic terms and recommended prevention and education interventions.

In 1996, Charles County had the lowest infant death rate for the State of Maryland. Since that time, however, the number of infant deaths has steadily increased. Although the numbers are relatively small, they impact on the infant mortality rate greatly bringing our 1998 infant death rate to second highest in the State. Trends early on demonstrated a disparity between the white and African-American populations, with the African-American population demonstrating a much higher rate than that of the white population. Even though, by 1998, this disparity was narrowing, Charles County's neonatal mortality rate remained the second highest in the state.

The Department of Health and Mental Hygiene's Division of Health Statistics reports the following information in its *Charles County Vital Statistic Profile, 1997 and 1998*:

- The birth rate per 1,000 population is 14.3 for Charles County, compared to a statewide rate of 13.8 in 1997. In 1998, Charles County's birth rate was again 14.3 compared to 14.0 for the State, making Charles County the sixth highest in the State. (Baseline: 7.2% in 1998)
- Births to adolescents under 18 years of age accounted for 3.8% of births in Charles County, compared to a statewide average of 4.2% in 1997. In 1998, the County rate was 4.0% compared to 4.0%, also for the State.
- In 1997, Charles County's percentage of women receiving first trimester prenatal care was less than the statewide average for both white and African-American populations. This was still true in 1998, with a rate of 86.4% for the County compared to 87.9% for the State.
- Charles County's percentage of low birth weight infants among whites was greater than the statewide average in 1997; the percentage of low birth weight infants among African-Americans was less than the statewide average. Charles County's percentages of low and very low birth weight infants for both populations were less than the statewide average in 1997. Still true in 1998, with the low birth weight rate even lower than the state.
- The neonatal mortality rate and the perinatal mortality rate for both populations were less than the statewide rates in 1997. In 1998, the neonatal rate increased to 10.1 compared to 6.3 for the State, making Charles County the second highest rate in the State.

- In 1998, Charles County's rate of late or no prenatal care was 3.0% compared to 2.9% for the State, placing the County eighth-highest in the State for late or no prenatal care.
- Local review of data and the matching of birth and death certificates for infants who died indicates that pre-term births are a significant problem leading to neonatal deaths.

The FY1999 Maryland and Charles County Prenatal Risk Assessments demonstrate the existence of possible determinants of infant mortality among Charles County pregnant women. The results of 340 risk assessments by eight county physicians indicated the following:

- Sexually Transmitted Diseases were the number one current medical condition listed.
- Cesarean sections were the number one factor listed under obstetrical history.
- Only 61% of the 340 women screened were questioned regarding abuse or violence, meaning that 39% were denied the opportunity to seek help with this issue.
- Six out of eight providers listed smoking as the number one psychosocial risk.
- Other factors listed included starting prenatal care late, having less than a 12<sup>th</sup> grade education, lack of emotional support, drug use and alcohol use, and it being less than one year since one's last delivery.

**Objective 1** - Reduce the infant mortality rate to no more than 5 per 1,000 live births.  
(Baseline: 13 per 1000 live births in 1998)

**Objective 2** - Reduce the fetal death rate to no more than 5 per 1,000 live births.  
(Baseline: 10 per 1000 total deliveries in 1998)

**Objective 3** - Increase to 90% the proportion of all pregnant women who begin prenatal care in the first trimester of pregnancy. (Baseline: 86.4% in 1998)

**Objective 4** - Reduce low birth weight to an incidence of no more than 5% of live births and very low birth weight to no more than 1% of live births. (Baselines: 7.2% and 1.4% in 1998)

## **Action Steps**

### **Community Involvement**

- ⇒ Continue FIMR review of infant deaths and analysis of related factors.
- ⇒ Coordinate efforts of FIMR and Child Fatality Review Board to identify areas of common consensus and gaps in service delivery.
- ⇒ Initiate education/outreach community action components of the FIMR process.

### **Public Health Education for Providers, Physicians, and Community**

- ⇒ Provide educational opportunities for the medical community and other providers of care to women regarding the pre-conceptional health needs of women, need for early prenatal care, and the need for appropriate STD screenings during pregnancy.
- ⇒ Initiate a media campaign to inform the community and young women regarding the need for pre-conceptional health care and the problem of infant mortality.
- ⇒ Develop an educational program aimed at grandparents to involve them in educating and motivating their grandchildren toward healthier lifestyles.
- ⇒ Engage the faith community in efforts to reach the community.
- ⇒ Work with the school health nurses to address problem of teen pregnancy and to encourage healthy lifestyles.

### **Public Health Services**

- ⇒ Work with the Healthy Families Program in providing intensive support to first time mothers and with the Teen Pregnancy Home Visiting Program, which focuses on educating the teens about the developmental needs of their children as well as looking at the developmental needs of the teens themselves.
- ⇒ Maintain the Healthy Start home visiting program, emphasizing the reduction of risk factors and the prevention of pre-term delivery to pregnant women.
- ⇒ Continue prenatal education classes provided to the community.
- ⇒ Work with physicians by personal visits to their practices and provide a regular newsletter highlighting the issues with suggestions for physician encouragement and motivation of clients to better and healthier lifestyles.

### **Assessment**

- ⇒ Continue the Health Department analysis of infant mortality statistics and the matching of birth and death certificates.
- ⇒ Continue FIMR monitoring of the infant mortality problem and involvement of the community in resolving the problem.
- ⇒ Continue the work of the Improved Pregnancy Outcome (IPO) grant.
- ⇒ Continue a review of medical records by IPO coordinator.



Partners

Charles County Health Department • Fetal Infant Mortality Review Board • Partnership for a Healthier Charles County

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Cross-Reference Table for Charles County

See Also

Maternal and Infant Health ..... 96

# DORCHESTER COUNTY



## Selection of Focus Area

The Dorchester County Health Department has for the past several years focused on six priority areas for the utilization of Core Funding. Those priorities are Coronary Heart Disease, Cancer, Family Planning and Maternal and Child Health, Communicable Disease, Physician Shortage, and Injuries. When requested by the Department of Health and Mental Hygiene (DHMH) to participate in the Health Improvement Plan Development process, the Health Officer choose tobacco as priority issue because it is a factor in four of the top five causes of death in Dorchester County. A coalition of interested partners were convened and the process of refining and narrowing the topic began. The group chose cessation among young adults as a focus area after determining that early cessation has the potential to lessen long-term negative health consequences. However, the group also believed that prevention of use is of vital importance. Therefore, the group choose young adult cessation and youth prevention as modules to develop.

### DEMOGRAPHIC OVERVIEW

#### Estimated Population, by Race – 1998

Total .....	29,510
White .....	64.2%
Other .....	35.8%

#### Estimated Population, by Age – 1998

Under 1 .....	350	18-44 .....	10,340
1-4 .....	1,440	45-64 .....	6,920
5-17 .....	5,230	65+ .....	5,230

All causes Mortality Rate (age-adjusted, per 100,000 population) 1996-1998 ..... 569.3

Infant Mortality Rate 1995-1999 ..... 7.4

Estimated Mean Household Income – 1999 ..... \$42,300

Estimated Median Household Income – 1999 ..... \$33,800

Civilian Unemployment Rate, Annual Average – 1999 ..... 7.3

#### Labor force (Top 4) – 1995

Manufacturing .....	4,100	Retail Trade .....	2,200
Services .....	3,500	Government (Federal, Military) .....	1,900

**Sources:** Maryland Vital Statistics, 1999  
Maryland Department of Planning, 1995, 1998, 1999

## Focus Area 1 - Tobacco Cessation in Young Adults

### Definition

Tobacco Cessation refers to assisting young adults, aged 18 to 25 years, to successfully stop using all tobacco products (cigarettes, cigars, chew, or snuff).

### Problem

- Cigarette smoking is a major cause of cardiovascular disease and is estimated to be responsible for 30% of all coronary heart disease (CHD) deaths in the United States. Smokers who quit have a substantial reduction in CHD death rates and within 10 years, the risk of CHD for ex-smokers (one pack or less per day) is the same as for nonsmokers (Maryland Cardiovascular Disease Prevention and Control Plan, July 1994).
- Researchers have identified more than 4,000 chemicals in cigarettes, which are also found in secondhand smoke. More than 430,000 deaths occur in the United States due to tobacco-related illnesses, which is exposure to, or use of, tobacco products. An estimated 3,000 of these deaths are nonsmokers who die from lung cancer.
- Asthma and other respiratory conditions are often triggered in children and can become worsened by tobacco smoke. Adults are also exposed to secondhand smoke, which can aggravate allergies and asthma, and can also lead to heart disease.
- Between 1990 and 1998, cigarette use in the general population declined by 9%, while in Maryland, there was a 2% increase in the prevalence of cigarette use.
- Young adults are the number one target of the tobacco industry.

#### Smoking Prevalence Among Maryland Adults, 1996-1997

African-American .....	21.5
White .....	21.5
Hispanic .....	14.1
Asian/Pacific Islander .....	7.7

#### Smoking Prevalence Among Maryland Adults, 1996-1997

All States .....	23.2
Maryland .....	20.6
Male .....	21.8
Female .....	19.4

#### Prevalence of Smoking In Maryland by Age, 1997

18-24 yrs. ....	23.6
25-44 yrs. ....	24.3
45-64 yrs. ....	18.7
65+ yrs. ....	11.1

Source: CDC State Tobacco Control Highlights, 1999

## Determinants

- Currently, 20.6% of adults in Maryland smoke.
- Females are initiating smoking at a higher rate than males and have lower cessation rates than men.
- The Centers for Disease Control and Prevention (CDC) calculates an average of 14.2 years of life lost for each death due to smoking (1990-1994).
- Maryland ranks 26<sup>th</sup> in the nation, with a death rate of 351 per 100,000 related to smoking (1990-1994). African-Americans have higher rates of smoking-related mortality than do whites in Maryland.
- Men have higher rates of smoking-related mortality than women do, and African-American males have the highest mortality rates of any race-sex group. (Maryland Cancer Control Plan, January 1994)
- Cancer Facts and Figures (1999), a compilation of cancer-related statistics by the American Cancer Society, ranked Maryland eighteenth in lung cancer mortality rates.
- Geographically, Dorchester County is the second largest county in Maryland, but with 51 persons per square mile, it the second most sparsely-populated county in the State, with a total population of 30,236. Compared with the rest of the State, Dorchester County has a higher concentration of minorities (29% vs. 24%) and higher poverty levels (35% vs. 20% below 200% of federal poverty level). The minority group is primarily composed of African-Americans. [APEX (Assessment Protocol for Excellence in Public Health) Phase II data report, Dorchester County Health Department, July 1994]
- In 1997, the four leading causes of death in Dorchester County were related to cigarette smoking. (Maryland Vital Statistics 1997)

**Objective 1** - By 2010, reduce the prevalence of smoking among 18- to 24-year-olds in Dorchester County. (Target: 15%; Maryland Baseline: 23.6%; Data: CDC, 1999)

### Action Steps

- ⇒ Establish baseline data for Dorchester County through a county-specific survey.
- ⇒ Determine barriers to and motivators for cessation among the target population through surveys and focus groups.
- ⇒ Develop strategies to assist target populations in cessation attempts based on information gathered through surveys and focus groups.
- ⇒ Build community coalitions and partnerships to assist target populations in quitting tobacco use (i.e. providing free/low cost patches in conjunction with behavior modification clinics, educating physicians about the positive effects of Zyban, etc.).

- ⇒ Coordinate efforts for training and technical support with human service providers to identify and counsel clients to stop tobacco use.
- ⇒ Increase access to tobacco cessation programs.
- ⇒ Work with local employers to offer worksite smoking cessation clinics.

**Objective 2 -** Reduce the proportion of children who are regularly exposed to tobacco smoke at home. (Target: 10% reduction; Baseline: to be determined)

### **Action Steps**

- ⇒ Establish baseline data for Dorchester County through a county-specific survey.
- ⇒ Provide information on the effects of secondhand smoke to parents who smoke and have children with respiratory illnesses, through physician's offices, local health centers, wellness centers, hospital emergency rooms, and school nurses.
- ⇒ Provide information, referral, and support for parents who desire to quit smoking.
- ⇒ Implement a social marketing campaign on the effects of secondhand smoke and the availability of cessation resources.
- ⇒ Provide information and education to children as to how they can protect themselves from secondhand smoke.

## Focus Area 2 - Tobacco Use Prevention

### Definition

Tobacco Use Prevention refers to a proactive stance to prevent the initiation of tobacco use among youth under the age of 18.

### Problem

- More than 430,000 deaths occur in the United States due to tobacco-related illnesses, (e.g. exposure to, or use of, tobacco products).
- Three thousand youth (ages 11 to 17) start smoking each day, and at least a third of these will die prematurely.
- An estimated five million persons under age 18 will lose their lives because of tobacco.
- Because adolescents are still maturing physically, they are more quickly addicted to nicotine.
- Advertising targets youth; the main reason is that 13 is the average age for smoking initiation.
- Once a person starts to smoke, and becomes addicted, s/he continues to smoke for many years.
- According to CDC data, among United States adults who smoke, 90% began smoking daily before the age of 19.
- Between 1990 and 1998, cigarette use in the general population declined by 9%, while in Maryland there was a 2% increase in the prevalence of cigarette use.
- Tobacco is a gateway drug: seventeen-year-olds who smoke cigarettes are 51 times more likely to use cocaine and 57 times more likely to use crack.
- According to the Maryland Adolescent Survey, tobacco usage among Dorchester County sixth graders has shown a steadily upward trend from 1994 to 1998 for both cigarettes and smokeless tobacco products.

### Determinants

- Tobacco use usually begins in early adolescence, with 13 years as the average age of smoking initiation.
- If adolescents can be kept tobacco-free, most will remain tobacco-free for the rest of their lives. (Maryland Cardiovascular Disease Prevention and Control Plan, July 1994)
- The short-term health effects of smoking for youth include damage to the respiratory system, addiction to nicotine, and the associated risk of other drug use.
- Long-term health consequences are reinforced by the fact that most youth who smoke regularly continue to smoke throughout adulthood. (CDC, Preventing tobacco use among young people: A report of the Surgeon General, 1994)

**Dorchester County Reported Student Tobacco Use -1998 School Year**  
*Percent of Students Reporting Substance Use by Grade Level and Time Period*

Substance	Grade 6			Grade 8			Grade 10			Grade 12		
	Ever Used	Last 30 Days	Last 12 Mon.	Ever Used	Last 30 Days	Last 12 Mon.	Ever Used	Last 30 Days	Last 12 Mon.	Ever Used	Last 30 Days	Last 12 Mon.
<b>Cigarettes</b>	17.2	6.0	8.4	36.4	19.8	25.0	46.2	25.3	29.6	55.4	31.6	39.4
<b>Smokeless Tobacco</b>	4.6	1.1	2.3	7.1	4.8	5.3	6.6	5.2	5.2	9.1	5.2	8.1

Source: *Maryland Adolescent Survey, 1998*

- In a 1999 survey of North Dorchester Middle School students, 49 out of 92 stated that peer pressure and the perception that 'everyone's doing it' and 'to be cool' is the main reason for kids starting to smoke cigarettes. [Dorchester County Alcohol, Tobacco, and Other Drugs (ATOD) Prevention Services, 1999]
- According to the CDC's Youth Risk Behavior Survey, the current cigarette use among teens increased from 27.5% in 1991 to 36.4% in 1997.
- Frequent cigarette use increased nationally from 12.7% in 1991 to 16.7% in 1997.
- The 1998 Maryland Adolescent Survey (MAS) indicates that of Dorchester County students surveyed, 6% of sixth graders, 19.8% of eighth graders, 25.3% of 10<sup>th</sup> graders and 31.6% of 12<sup>th</sup> graders had smoked cigarettes in the 30 days prior to the survey. These percentages are significantly higher than the overall Maryland percentages of 4.2% of sixth graders, 14.8% of eighth graders, 23.9% of 10<sup>th</sup> graders, and 28.6% of 12<sup>th</sup> graders who have smoked in the 30 days prior to the survey.
- Percentages of smokeless tobacco usage by youth in Dorchester County as reported in the MAS are higher than the state percentages, with the exception of sixth graders. Dorchester students in sixth grade report usage in past 30 days as 1.1% compared to statewide usage of 1.3%; eighth graders in Dorchester report 4.8% usage as compared to statewide usage of 3.2%; 10<sup>th</sup> graders in Dorchester report 5.2% usage as compared to statewide usage of 4%; and 12<sup>th</sup> graders in Dorchester report 5.2% usage as compared to statewide usage of 4.2%.

**Objective 1** - By 2010, reduce the prevalence of smoking among Dorchester County students in grades six through 12. (Target: 10% reduction in grades six, eight, 10, and 12; Baseline not provided; Data: Maryland Adolescent Survey, Dorchester County-specific data)

### **Action Steps**

- ⇒ Coordinate school-based and community-oriented tobacco use prevention and cessation programming.
- ⇒ Increase prevention and health promotion in after-school programs.
- ⇒ Educate merchants regarding unlawful sales of tobacco products to minors.
- ⇒ Enforce existing youth access laws.
- ⇒ Build community coalitions and partnerships to strengthen tobacco use prevention and intervention strategies for youth.
- ⇒ Develop and implement social marketing campaigns targeting current smokers and at-risk populations.
- ⇒ Increase community group interventions (churches, 4-H, Boy Scouts, Girl Scouts, etc.).
- ⇒ Increase access to tobacco cessation programs for youth.

### **Partners**

American Lung Association • Bethel Church • Dorchester County Board of Education • Dorchester County Health Department • Dorchester County Local Management Board • Dorchester County Wellness Centers • Dr. Hiers' Dental Office



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### Cross-Reference Table for Dorchester County

See Also

Child and Adolescent Health .....	33
Tobacco Use .....	136

# FREDERICK COUNTY



## Selection of Focus Area

The module topic “Developing a Support System to Improve Dental Health of Frederick Country Children” was selected as a result of discussion at the Healthy People 2010 Planning Meeting. The members of the Frederick County workgroup determined that the improvement of children’s dental health was one of the most immediate problems facing the County. Other critical problems include access to care, breast and cervical cancer, colo-rectal cancer, lung cancer, prostate cancer, mental health, substance abuse, and improvement of the public health infrastructure. All these problems continue to be the focus of extensive efforts in Frederick.

### DEMOGRAPHIC OVERVIEW

#### Estimated Population, by Race – 1998

Total .....	186,780
White .....	91.1%
Other .....	8.9%

#### Estimated Population, by Age – 1998

Under 1 .....	2,660	18-44 .....	79,950
1-4 .....	10,260	45-64 .....	38,240
5-17 .....	38,050	65+ .....	17,620

All causes Mortality Rate (age-adjusted, per 100,000 population) 1996-1998 ..... 437.1

Infant Mortality Rate 1995-1999 ..... 5.3

Estimated Mean Household Income – 1999 ..... \$74,000

Estimated Median Household Income – 1999 ..... \$63,900

Civilian Unemployment Rate, Annual Average – 1999 ..... 2.2

#### Labor force (Top 4) – 1995

Services .....	25,400	Government (Federal, Military) .....	11,800
Retail Trade .....	16,300	Construction .....	8,800

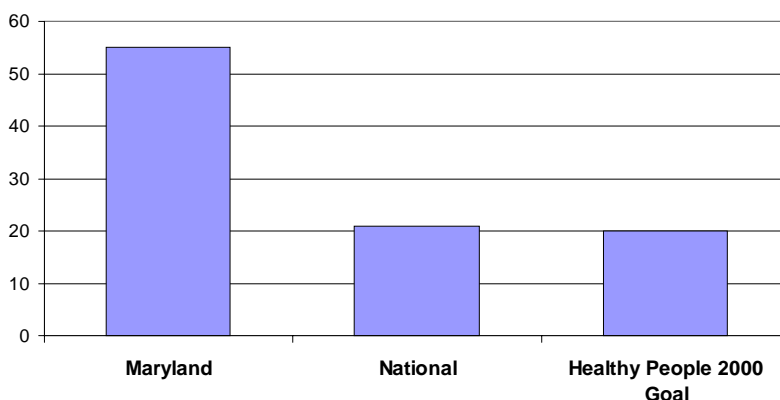
**Sources:** Maryland Vital Statistics, 1999  
Maryland Department of Planning, 1995, 1998, 1999

## Developing a Support System to Improve the Dental Health of Frederick County Children

### Problem

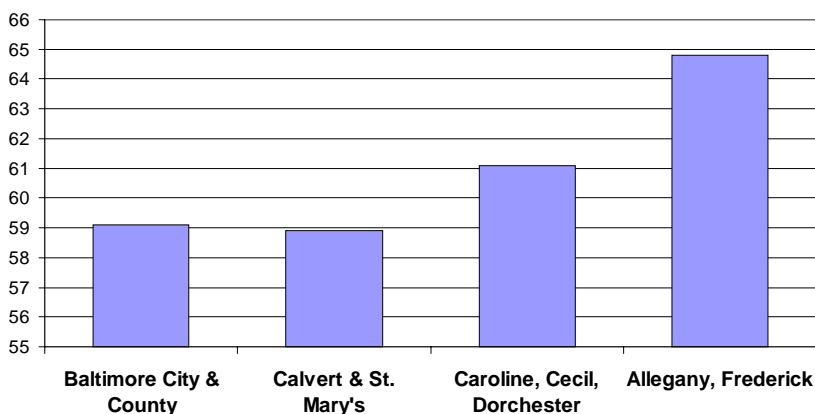
Dental caries are the most prevalent chronic childhood disease. A Survey of the Oral Health Status of Maryland School Children, 1994-1995, indicated that children living in non-fluoridated communities have nearly 50% more decayed teeth than children living with fluoridated water. The survey of Maryland school children indicated that children in Western Maryland, including the Frederick area, have more decay than children in Baltimore City and Southern Maryland. School-age children averaged nearly four cavities each, and 60% had at least some decay. Dental care access and utilization by low-income children are major problems in Frederick County, as private dentists participate only minimally in the *HealthChoice* reduced-fee insurance program. The Frederick County Health Department (FCHD) Dental Clinic sees an average of 178 children per month and about 2,136 per year. Use of preventive services from the FCHD Dental Clinic help children avoid the infectious process of cavities that continues throughout life. Poor dental health impacts many aspects of life including nutrition, growth patterns related to poor oral feeding, and even unemployment due to poor appearance as a result of tooth loss. Prevention of dental caries is better than treatment.

**Percent of Children With Untreated Dental Caries in Maryland, the U.S., and the Healthy People 2000 Goal, 1994-1995**



Source: Survey of the Oral Health Status of Maryland School Children, 1994-1995

**Percent of Children With Caries by Region in Maryland, 1994-1995**



Source: Survey of the Oral Health Status of Maryland School Children, 1994-1995

## Determinants

Dental caries continue to be a major health problem for children in Maryland. The Survey of the Oral Health Status of Maryland School Children, 1994-1995, included over 192,000 children in four regions of the State, including Frederick County. The study revealed Maryland's current rate of decay, children at highest risk, the relationship of care to type of reimbursement, the impact of living in areas with non-fluoridated water and/or drinking only bottled water, and sealant use.

While children enrolled in the Maryland Children's Health Program (MCHP) are covered for dental care, only 33% of those children saw a dentist every six months, compared to a State average of 48% of children with other insurance. These vulnerable children of low-income families suffer from frequent, urgent oral problems with inadequate dental care. In 1995, fewer than one in five of Medicaid-eligible children received preventive dental services. The Survey of the Oral Health Status of Maryland School Children, 1994-1995, identified that children on Medical Assistance had a decay rate of 2.71 teeth to 2.04 teeth of children with private dental insurance. Additionally, 70% of children on Medical Assistance had untreated decay, versus 50% in children with private insurance or fee for service. In Maryland, young children of low-income families are 75% more likely to have untreated cavities than are children 17 and older. In 1995, only 40% of the children in Maryland were cavity-free.

The Survey of the Oral Health Status of Maryland School Children, 1994-1995, also identified differences in the percentages of tooth decay between the white and non-white populations. The non-white population had 61.3% caries while the white population had 59.8% caries. This means that specific attention should be paid to the non-white population in the provision of preventive care. Frederick County has the highest percentage of caries frequency in the State. However, as the number of children in Frederick with MCHP insurance steadily increases, the children will probably be treated by the Frederick County Health Department Dental Clinic. Recent statistics for the Dental Clinic indicate the rate for children without dental insurance whose last visit was for a check-up was two-thirds the rate for children with insurance.

## Fluoridation of Water Supplies/Sealants

Fluoride, a natural mineral, has been shown to reduce cavities in both children and adults by making the tooth structure stronger and more resistant to acid attacks. As a result, the rate of tooth decay increases for children living in areas without fluoridated water. Three Frederick communities have fluoridated water, which means 73% of Frederick children have fluoride in their public water supply. The mean decay experience in children residing in non-fluoridated communities is 2.97. A bigger issue in Frederick County is that 61% of the people live in areas without public water supplies and must rely on private wells. While fluoride is the most effective way to prevent dental caries in all children, the use of sealants must be considered for the children living in Frederick County. Sealant applied to the surfaces of the teeth reduces the risk of tooth decay. The Survey of the Oral Health Status of Maryland School Children, 1994-1995, described white children as being three times as likely to have sealants as non-white children. Western Maryland was reported to have a 27% sealant utilization rate. This figure indicates that a sealant program would be an important part of Frederick County's dental plan particularly for minority children and for all children living in areas that cannot be fluoridated.

**Objective 1 -** Increase service provision for children of the medical assistance population ages three through 19 from 17% to 70% by the year 2010.

**Action Steps**

- ⇒ Partner with Head Start; Women, Infants and Children (WIC); and the Frederick County School Health Program by conducting annual staff training to raise awareness and increase outreach to the community regarding dental clinic services.
- ⇒ Add new staff positions in order to increase the service level at the Frederick County dental clinic.

**Objective 2 -** Reduce by 20% the proportion of children and adolescents with untreated dental decay by 2010.

**Action Steps**

- ⇒ By 2005, obtain data on the number of children, kindergarten through 12th grade, with untreated dental decay, through participation in the University of Maryland Children's Dental Health Survey, and begin to track dental screenings thorough the School Health Program.
- ⇒ By 2010, increase by two the number of communities who have optimal fluoride in the water using the State and local funding and education resources.
- ⇒ By 2005, increase by 20% the number of dental health education programs given in schools and in the community.

**Objective 3 -** By 2010, increase by 20% the proportion of children who have received dental sealants on their molar teeth.

**Action Steps**

- ⇒ By 2005, in conjunction with the Public Health Committee of the Frederick County Dental Society, conduct surveys of sealant prevalence in non-fluoridated schools.
- ⇒ By 2005, coordinate efforts with the local dental society public health committee to reach children in non-fluoridated areas through a school-based sealant program.
- ⇒ By 2005, develop software to track dental health issues identified in the school system, including the number of dental screenings returned to the school system, and for supporting the school sealant program.

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Partners

Frederick County Health Department • Frederick County Dental Society

<b>Cross-Reference Table for Frederick County</b>	
<i>See Also</i>	
Child and Adolescent Health .....	33
Oral Health .....	107

# GARRETT COUNTY

## Selection of Focus Area

The Garrett County Health Department, in addition to “Improving the Dental Status of Children,” has chosen the following as public health priorities for FY2000:

- Heart Disease and Stroke
- Tobacco Use
- Alcohol and Drug Use
- Teen Pregnancy
- Unintentional Injury



### DEMOGRAPHIC OVERVIEW

#### Estimated Population, by Race – 1998

Total .....	29,240
White .....	99.2%
Other .....	0.8%

#### Estimated Population, by Age – 1998

Under 1 .....	350	18-44 .....	10,420
1-4 .....	1,340	45-64 .....	6,560
5-17 .....	6,260	65+ .....	4,310

All causes Mortality Rate (age-adjusted, per 100,000 population) 1996-1998 ..... 491.9

Infant Mortality Rate 1995-1999 ..... 7.9

Estimated Mean Household Income – 1999 ..... \$39,900

Estimated Median Household Income – 1999 ..... \$31,300

Civilian Unemployment Rate, Annual Average – 1999 ..... 8.5

#### Labor force (Top 4) –1995

Services .....	4,700	Manufacturing .....	1,800
Retail Trade .....	3,000	Government (Federal, Military) .....	1,600

**Sources:** Maryland Vital Statistics, 1999  
Maryland Department of Planning, 1995, 1998, 1999

## **Improving Dental Status of Children**

### **Problem**

Many children in Garrett County are unable to access oral health care services and preventive interventions. The extent and scope of the oral health problems in Maryland were underscored in the Survey of the Oral Health Status of Maryland School Children, 1994-1995. A study of 3,500 school children found that Maryland children have significantly more dental caries experiences than the national average. Nearly 60% of Maryland school children have had dental decay, as compared with 45% in the United States. The same study published the following conclusions outlining disparities in dental status of children:

- Children living in Western Maryland have more decay experience than children in Baltimore and Southern Maryland.
- The decay experience among children in the lower socio-economic groups is approximately 31% higher than the state average.
- Children who receive Medicaid have 16% higher caries experience and 30% more untreated decay than the state average.
- Only 3% of poor children have dental sealants compared to the national rate of 23%.

In measures of socio-economic status, Garrett County consistently ranks among those with the worst results. This is the case for measures such as the percent of children living in poverty, unemployment rate, and low average weekly wages. About 50% of children live in homes with incomes less than 185% of the federal poverty level.

### **Determinants**

Dental disease has been recognized as one of the most preventable diseases, and yet also one of the most prevalent among young people. Preventive dental practices are well identified but more than one out of four families do not apply them. There are many identified barriers to dental care. Some barriers originate with providers. Many are unwilling to enter into contract agreements with managed care organizations (MCO's) due to past experience with low reimbursements, influx of new patients, and hassles with claims and preauthorization. Other barriers to care exist because of cultural practices of residents. Many lack information about proven preventive dental measures, such as fluoride supplements and sealants. Some patients have a practice of only going to the dentist in response to pain.

Children living in non-fluoridated communities have nearly 50% more decayed teeth than children living in fluoridated communities. In Garrett County, only 7% of residents live in areas with fluoridated public water systems. This is primarily because many homes are not located within a municipality. However, of the eight incorporated towns, only one has a fluoridated public water supply. The recommended ratio of dentist to population is one dentist per 1,300 people. Locally, eight dentists practice in Garrett County where the population is approximately 29,000. This ratio of one dentist per 3,625 people is nearly three times less than the recommended ratio and indicates a critical lack of dental providers.



The goals of the Garrett County Health Department are to:

Reduce the proportion of:

- children and adolescents who have dental caries in their primary or permanent teeth.
- children, adolescents, and adults with untreated dental decay.

Increase the proportion of:

- children who have received dental sealants on their molar teeth.
- the population served by community water systems with optimally fluoridated water.
- children and adolescents under 19 years of age, who are at or below 200% of the federal poverty level, who receive any preventive dental service during the past year.
- local health departments and community-based health centers, including community, migrant, and homeless centers, that have an oral health component.

**Objective1** - By 2010, a survey of the Maryland Children's Health Program (MCHP) clients will show families reporting at least 85% of their children age three to 18 had been to the dentist in the past year. (Baseline in 1999: 63%)

**Objective 2** - By 2010, kindergarten registration exams will reveal less than 25% of children with untreated dental decay. (Baseline in 1998: 41%)

**Objective 3** - By 2010, kindergarten registration exams will reveal a DMF ratio (number of decayed, missing, or filled teeth/child) of less than 1.4. (Baseline in 1998: 1.86)

### **Action Steps**

- ⇒ Develop and conduct a comprehensive community education campaign promoting preventive dental health care.
- ⇒ Develop a sustainable dental health network of providers accepting the Maryland Children's Health Insurance Program.
- ⇒ Recruit dental providers to the area.
- ⇒ Establish a list of providers with the capability to accept referrals of pediatric clients needing sedation.
- ⇒ Conduct educational sessions on the advantages of public water fluoridation.

Partners

Allegany County Health Department • Garrett/Allegany Dental Society • Garrett Board of County Commissioners • Garrett County Board of Education • Garrett County Community Action, Inc. • Garrett County Head Start Program • Garrett County Memorial Hospital • Garrett County Health Department • Garrett County Health Planning Council • Garrett County Women, Infants, and Children (WIC) Program • Healthy Families Garrett County • Office of Rural Health, Health Resources and Services Administration • Maryland Office of Oral Health • Maternal and Infant Task Force • Partnership for Children and Families • Western Maryland Area Health Education Centers

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University of Maryland Dental School, Department of Pediatric Dentistry; Maryland Department of Health and Mental Hygiene, Office of Child Health. (1995). *Survey of the oral health status of Maryland school children, 1994-1995*.

Cross-Reference Table for Garrett County	
See Also	
Child and Adolescent Health .....	33
Oral Health .....	107

# HARFORD COUNTY

## Selection of Focus Area

Healthy Harford, a coalition of 42 private and not-for-profit businesses and public agencies was established in 1994 and incorporated in 1995, with the goal of making Harford County the healthiest county in Maryland. In October 1999, Healthy Harford began planning to implement “A Better Harford...Together” (ABHT), based on the national Healthy Communities model. Because the ABHT process was in the early planning stages at the time of the State’s development of the health improvement plan, a true community planning process was not possible. After much consideration, it was determined that the Harford County Health Department should develop the health improvement modules for the County. The Health Department’s Senior Staff identified the following priority issues:



- |                                    |                                      |
|------------------------------------|--------------------------------------|
| 1. Substance Abuse and Tobacco Use | 6. Access to Quality Health Services |
| 2. Public Health Infrastructure    | 7. Chronic Diseases                  |
| 3. Heart Disease and Stroke        | 8. Sexually Transmitted Diseases     |
| 4. Environmental Health            | 9. Mental Health                     |
| 5. Cancer                          | 10. Injury/Violence Prevention       |

### DEMOGRAPHIC OVERVIEW

#### Estimated Population, by Race – 1998

Total .....	214,670
White .....	86.6%
Other .....	13.4%

#### Estimated Population, by Age – 1998

Under 1 .....	2,950	18-44 .....	88,070
1-4 .....	12,350	45-64 .....	46,940
5-17 .....	43,310	65+ .....	21,050

All causes Mortality Rate (age-adjusted, per 100,000 population) 1996-1998 ..... 461.6

Infant Mortality Rate 1995-1999 ..... 6.7

Estimated Mean Household Income – 1999 ..... \$69,000

Estimated Median Household Income – 1999 ..... \$58,400

Civilian Unemployment Rate, Annual Average – 1999 ..... 3.2

#### Labor force (Top 4) – 1995

Services .....	21,300	Retail Trade .....	15,800
Government (Federal, Military) .....	20,700	State & Local Government .....	7,900

**Sources:** Maryland Vital Statistics, 1999  
Maryland Department of Planning, 1995, 1998, 1999

## **Focus Area 1 - Public Health Infrastructure**

### **Definition**

Public health infrastructure is the broad foundation of facilities, staff, community partners, and general support services systems that allow the local health department to efficiently and effectively function. Infrastructure includes the people, equipment, computer software, and communications capability to effectively work with all of the pieces of the health care system.

### **Problem**

Over the last eight to 10 years, the local health department has experienced a slow but steady erosion of its ability to provide timely and effective support of expanding public health program priorities. Today, local health departments do not have the capability to “absorb” or “stretch” existing resources and personnel to make a new program happen by adding it to its “core capabilities.” For public health programs to be effective, local health departments must have adequate infrastructure to plan, implement, and evaluate programs. In addition, the community must be an active player and willing partner for governmental impact on the community.

Population growth in Harford County has been at an accelerated pace for the past seven years. More people demand more service both in clinical and environmental areas. Our modern day society and its “fast food and fast services on demand” mentality, continue to pressure the administrative core capabilities of the local health departments.

### **Determinants**

#### **Bureaucracy**

A key determinant of the adequacy of a department’s infrastructure capacity is its ability to get new programs operational and deliver timely, expected performance. Paperwork requirements to process personnel transactions and budgets have grown to major workloads for understaffed local health department administrative units. Recent modern technology applications help but reliance on hard copy and multi-signatures continues. Time spent on completing and processing paperwork is time not spent delivering services.

#### **Needs Assessments**

In 1995, Healthy Harford, a partnership of 42 member agencies, was incorporated. The goal of the non-profit group of public health, hospitals, faith and business communities, schools, and interested citizens, was to make Harford County the healthiest county in Maryland. Healthy Harford sponsored a Community Health Needs Assessment Project (CHAP) in 1996 to identify unmet health needs of residents in the County. The needs assessment aptly illustrated the need for a better transportation system, new and expanded services, and increased health education and screening initiatives throughout the community. Partnerships of individuals, agencies, and groups

were created and called Community Action Teams, with the goal of addressing some of the most urgent community health needs. While many of the new partnerships have reached, or exceeded, their goals, (for instance, the Health Department partnership with Upper Chesapeake Health, a local non-profit health care system, resulted in the delivery of from 7,000 to 16,000 flu shots over the past three years), there is still much to do. A second Community Needs Assessment was conducted in the fall of 2000. Today, Healthy Harford is the preeminent partnership that initiates and provides continuity for health-related efforts in Harford County.

### **A Better Harford...Together**

Over the longer term, key senior staff of the Harford County Health Department, including the Health Officer, are a part of the driving force behind the “A Better Harford...Together,” a year long public/private effort to do long-term visioning and action planning using the national Healthy Communities model. The planning project is sponsored by Healthy Harford. It is the goal of the Harford County Health Department to, by January 2002, complete a detailed needs assessment and analysis of core preventative and environmental health service needs for the next eight years.

**Objective 1** - By January 2001, pursue follow-up action plans for identified health care issues resulting from the combined findings of the “A Better Harford...Together” committee and the latest Community Health Needs Assessment.

**Objective 2** - By January 2002, develop a County health improvement plan.

**Objective 3** - By January 2003, develop a report card of the County’s progress to date toward reaching its health care goals.

**Objective 4** - By January 2004, be capable of providing adequate administrative and management information support services to all Health Department programs.

**Objective 5** - By July 2005, have in place an integrated data system that provides for a central health data resource where both public and private health data pertinent to major health concerns are available and accessible for planning and performance evaluation purposes.

### **Action Steps**

- ⇒ Using the public/private coalition of Healthy Harford, Inc., integrate key health department staff in the countywide planning process.
- ⇒ Facilitate community groups and public/private organizations to develop priority needs and formulate recommendations for action.
- ⇒ Hire additional staff and/or train existing staff in health planning and community collaboration skills.

- ⇒ Hire additional data/statistical professional staff.
  - ⇒ Upgrade and integrate existing health data systems to allow for timely data collection and secure storage of data.
  - ⇒ Work with public and private partners to pull together data sources.
  - ⇒ Organize data for use by all County, public and private health providers in planning to meet health care needs.
  - ⇒ Work with State health and environmental agencies to identify mutual health data needs, sources, and collection methods.
  - ⇒ Cross-train current staff in administrative support and data collection activities.
  - ⇒ Secure additional personnel (administrative, clerical, technical, professional) to meet current and future demands
- 

## Partners

A Better Harford... Together • Bel Air Athletic Club • Board of Education and the Harford County Public School System • Council of Community Services • Chamber of Commerce • Children's Council • Core Service Agency • Criminal Justice Coordinating Council • Harford County Government • Harford County Health Department • Harford County Local Management Board • Healthy Harford, Inc. • Parks and Recreation Department • Service Reform Initiative • Upper Chesapeake Medical Center

## Related Reports

Healthy Harford, Inc. (1996). *Community needs assessment*.

## **Focus Area 2 - Substance Abuse Treatment**

### **Definition**

Substance abuse is defined as the problematic consumption or illicit use of alcoholic beverages, tobacco products, and drugs, including the misuse of prescription drugs (Healthy People 2010). Access, or use of substance abuse services, takes into consideration the availability of services, the ability to pay, insurance coverage of services, and the cultural appropriateness of available treatments for different populations. Infrastructure is defined as the systems, competencies, relationships, and resources that enable performance of essential public health services in every community (Healthy People 2010).

### **Problem**

Harford County, like other rapidly growing suburban counties in the Baltimore Metropolitan Area, is feeling the effects of urban substance abuse problems within its own communities. As the County has grown, so has the population of youth between the ages of 12 and 17. As more youth are identified, more and more are found to be using drugs and alcohol, creating a demand for more services. The number of youth admissions to substance abuse treatment programs is on the rise. According to a February, 2000, Maryland Drug Treatment Task Force report, in FY1998, 270 Harford County youth were admitted to treatment programs, up from 238 in FY1997.

As of February, 2000 (seven months into FY2000), Adolescent Addictions, the Health Department unit responsible for treating adolescent alcohol and drug users, had already seen 266 clients, the same number of teens seen during all of 1999. Due to the fact that counselors are not required to begin a file on one-time only visits, it is estimated that this number is actually much higher.

Although Harford County has several identified treatment gaps, there are no obvious racial or ethnic disparities. Health Department substance abuse treatment programs are filled to capacity with the current level of staff. Current funding and salary levels of addiction counselors are major factors in limiting treatment capacity.

### **Determinants**

#### **Treatment Gaps**

Intensive Outpatient Services are currently not available for youth ages 12 to 17 through Adolescent Addictions, or elsewhere in the County. However, intensive outpatient slots are available in treatment centers such as the Lois Jackson Unit, Pathways, and Mountain Manor. There are no publicly-funded Adolescent Inpatient Substance Abuse treatment slots available in the county. Privately-funded inpatient treatment centers are not always accessible to youth. If youth are able to get into private treatment slots (slots are available or they can afford to pay), treatment modalities are sometimes focused on adults and groups may include adults and youth in the same

meeting. For the dually diagnosed, the nearest private treatment slots are Sheppard Pratt and Taylor Manor, both in Baltimore County. The uninsured, underinsured, and Medicaid dually diagnosed clients are referred to Keypoint Mental Health Center for treatment.

Other treatment gaps include increased case management for all clients, especially the dually diagnosed, increased aftercare, the need for more follow-up after treatment is completed, and a need to expand Drug Court to include a similar system for juveniles. The expansion of services into these areas would provide a more seamless continuum of care for adolescents and reduce recidivism rates.

While most adolescents have treatment available, teens may not seek or complete it because parental permission is needed, the stigma of treatment may be an obstacle to seeking help, and insurance coverage may shorten the length and type of treatment.

### **School Programs**

The Health Department provides adolescent addictions services in all area high schools and middle schools. Schools, through school suspensions and the Board of Education, are the most common source of referrals. Student Assistance Teams made up of school administrators, teachers, school nurses, and health department Adolescent Addiction counselors, develop the treatment plans. The student's parents become involved at the assessment and evaluation phase and also in development of the treatment plan. Health Department substance abuse counselors typically see the youth in the school setting after the youth is referred to Adolescent Services and linked to group therapy and individual counseling.

Youth see a counselor one time a week for a private session and participate in one group session for six weeks, or until treatment goals are reached. Most youth need more intensive therapy to address the multiple issues they present in treatment. Intensive outpatient therapy would involve a minimum of nine hours a week in treatment.

### **Insurance Benefits**

Insurance companies dictate treatment benefits, which may conflict with the recommended length and type of treatment outlined in the treatment plans. Insurance benefits vary widely and impact treatment tremendously. Although the average length of treatment is 16 weeks, more treatment visits may be warranted. However, the insurance carrier may approve only a certain number of visits. Some patients may need to space treatments over a longer period of time than is allowed by their insurance carriers. After 16 weeks, counselors see attendance decline due to reimbursement issues or because the parents can no longer take the time off work to bring the youth in for treatment on a regular basis. If a patient is diagnosed with mental health issues, the length of treatment is further extended. In addition, the Department of Juvenile Justice may court order the type and duration of treatment but parents may not have the financial means or insurance benefits to complete treatment. A carve out for addictions, like mental health, would benefit the entire substance abuse system.



## **Infrastructure**

As the population increases in the County, the number of adolescent substance abuse treatment referrals increase and also the demand for more programs, more staffing, and ultimately, more money. If the demand for services and level of service continue to increase, there will not be enough staff to treat adolescents' service needs. Current staff levels are not keeping pace with the demand for services. Slow response to treatment needs is also an issue.

The level of salary for an addiction counselor is unacceptably low. Therefore, it is difficult to recruit and keep qualified counselors. Addiction counselors should have established skills set in order to offer effective services to adolescents. Delays in the merit system hiring procedures also contribute to employment and retention of counselors.

## **Coordination of Services**

There is a lack of treatment provider coordination between the public and private sector. The Health Department should increase coordination of services with county mental health providers. Coordination between the Health Department and Juvenile Justice is better than ever. A single point of entry for services would be ideal.

## **Complex Youth Issues**

Youth who tend to use substances at a young age and exhibit "sensation-seeking" behaviors benefit from early, more intensive preventive interventions (Healthy People 2010). Youth who are dually diagnosed (with mental health and substance abuse issues) need treatment for both disorders, but treatment programs that focus on the whole patient are not the norm. (Healthy People 2010). Prevention and treatment of substance abuse must address all abused substances in order to be successful. Due to the insidiously addictive nature of nicotine, tobacco prevention and treatment measures are an equally important component of a comprehensive substance abuse prevention program.

Youth today are more likely to be depressed or feel "stressed out" due to the number of demands or pressures they feel they are faced with every day. Families are more complex and youth deal with more complex situations than ever before. Lack of self-esteem and even a lack of hope are also important factors affecting the youth of today. Messages that they get from their environment, peers, families, schools, the media, and other social situations are conflicting. Adolescents without good coping skills are faced with trying to sort these messages out and make sense of them in their ever-increasingly complex lives. Youth that are unable to cope turn to substances or situations to escape from reality and to find the next high.

There are no obvious racial or ethnic disparities in accessing substance abuse treatment. Transportation and cost of care are not issues in accessing treatment. Cost of services is based on a sliding fee scale and the Health Department accommodates requests for fee reductions.

During FY1998, 270 youth were admitted to treatment programs, up from 238 in FY1997, according to a February, 2000, Maryland Drug Treatment Task Force report. As of February, 2000 (seven months into FY2000), Adolescent Addictions had already seen 266 clients, the total number of youth seen in all of FY1999.

Healthy People 2010 reported that although it is commonly accepted that drug use is a significant problem in the U.S., actual data are not available to describe the number of persons who need nor the number who receive drug and alcohol treatment. However, this gap appears to be growing. This issue does not address the availability of treatment services.

<b>Percentage of Students, by Grade, Reporting Drug Use by Type of Substance, Harford County, 1998</b>												
<b>Substance</b>	<b>Grade</b>											
	<b>6<sup>th</sup></b>			<b>8<sup>th</sup></b>			<b>10<sup>th</sup></b>			<b>12<sup>th</sup></b>		
	Ever Used	Last 30 Days	Last 12 Months	Ever Used	Last 30 Days	Last 12 Months	Ever Used	Last 30 Days	Last 12 Months	Ever Used	Last 30 Days	Last 12 Months
Cigarettes	6.8	2.8	3.1	37.7	21.6	30.6	54.7	34.4	44.2	57.0	34.7	43.0
Beer, Wine, Wine Coolers	10.9	4.3	5.7	40.4	25.5	35.6	64.8	44.0	60.5	71.5	49.7	61.8
Five or more servings of alcohol/occasion	3.5	1.5	2.0	21.1	10.8	18.5	46.8	32.9	44.3	56.5	40.8	52.0
Marijuana	0.3	0.3	0.3	16.7	11.2	13.9	42.7	31.3	36.1	43.1	24.9	34.1
Cocaine	0.3	0.3	0.3	3.5	1.6	3.2	9.2	6.3	8.8	13.1	6.7	12.1
Heroin	0.4	0.4	0.4	3.5	1.6	3.2	5.2	3.7	4.7	3.6	1.2	3.1
Any form of Alcohol	11.3	4.8	6.7	41.4	27.7	37.5	66.6	47.2	62.8	74.4	55.0	66.6
Any drug other than alcohol or tobacco	3.3	2.3	2.3	23.3	16.6	20.1	47.8	33.7	39.3	46.5	31.3	39.7

**Source:** Maryland Adolescent Survey, 1998

Also, access to clinically appropriate and effective treatment for alcohol problems is limited. Not everyone who wishes to receive treatment for alcohol problems is able to receive their treatment choice. There is wide variation in treatment protocols and content among jurisdictions and within communities.

**Objective 1** - By January 2005, have up and operating a countywide Substance Abuse Data Information System for all public and private treatment program clients.

**Objective 2** - By July 2004, have in place 350 treatment slots for cocaine and heroin abusers in Harford County.

**Objective 3** - By September 2005, have a revised school-based drug, alcohol, and smoking prevention program that includes 40 hours of required attendance by all students in grades five, seven, and nine.

### **Action Steps**

#### *Treatment Gaps:*

- ⇒ Improve rapid assessment and placement in treatment by July 2001. (HCHD)
- ⇒ Increase access to intensive outpatient services by January 2001. (HCHD and partners)
- ⇒ Increase inpatient adolescent treatment slots by January 2002. (HCHD and partners)
- ⇒ Improve follow-up, case management, and after-care programs (ongoing). (HCHD)
- ⇒ Expand existing programs, including Juvenile Drug Court and Detention Center Services by January 2001. (HCHD and partners)
- ⇒ Improve coordination of services with county mental health providers by January 2002. (HCHD and mental health providers)
- ⇒ Improve services for the dually diagnosed by July 2001. (HCHD and providers)

*Infrastructure:*

- ⇒ Increase professional staffing levels by March 2001. (HCHD)
- ⇒ Secure additional funding for programs by January 2002. (HCHD and partners)
- ⇒ Improve salary levels for addiction counselors by July 2005. (HCHD and State of Maryland)

*School Services:*

- ⇒ Add strong family therapy component by September 2003. (HCHD and partners)
  - ⇒ Add social worker component by July 2003. (HCHD and partners)
- 

## **Partners**

A Better Harford... Together • Circuit Court of Harford County • Countywide Action Team to Fight Underage Drug Use • Criminal Justice Coordinating Council • Department of Juvenile Justice • Department of Social Services • Dr. Feridoon Taghizadeh • Harford County Health Department • Harford County Public Schools and the Board of Education • Keypoint Mental Health Center • Local Coordinating Council • Lois Jackson Unit • Mountain Manor • Office of Drug Control Policy • Office of the Public Defender • Parent Teacher Associations • Parole and Probation • Pathways • Private Providers • Sheppard Pratt Hospital • State's Attorney's Office • Taylor Manor • Teen Diversion

References

Alcohol and Drug Abuse Administration. (FY 1998, 1999). *Trends and patterns: Maryland alcohol and drug abuse treatment.*

Harford County Health Department. Adolescent addictions data (number of youth in treatment in Harford County).

Maryland Drug Treatment Task Force: Lt. Governor Kathleen Kennedy Townsend, Chair; Delegate Dan K. Morhaim, Vice Chair. (2000, February 29). *Filling in the gaps: Statewide needs assessment of county alcohol and drug treatment systems.*

U.S. Department of Health and Human Services. (2000). *Healthy People 2010.* Washington, DC: U.S. Department of Health and Human Services, U.S. Government Printing Office.

Cross-Reference Table for Harford County

See Also

Public Health Infrastructure .....	115
Substance Abuse Treatment .....	132

# HOWARD COUNTY



## Selection of Focus Area

The Howard County Board of Health selected the topic of Chronic Disease for analysis, as additional areas of interest are being investigated in other forums. At the first community meeting for this effort, data on asthma, chronic obstructive pulmonary disease (COPD), diabetes, multiple sclerosis (MS), osteoporosis, and arthritis were presented. After discussion, the community members chose asthma and diabetes as topics to study for the Howard County component of the Maryland Health Improvement Plan.

### DEMOGRAPHIC OVERVIEW

#### Estimated Population, by Race – 1998

Total .....	236,380
White .....	78.3%
Other .....	21.7%

#### Estimated Population, by Age – 1998

Under 1 .....	3,340	18-44 .....	107,380
1-4 .....	13,250	45-64 .....	50,930
5-17 .....	44,460	65+ .....	17,020

All causes Mortality Rate (age-adjusted, per 100,000 population) 1996-1998 ..... 412.7

Infant Mortality Rate 1995-1999 ..... 4.6

Estimated Mean Household Income – 1999 ..... \$91,000

Estimated Median Household Income – 1999 ..... \$75,500

Civilian Unemployment Rate, Annual Average – 1999 ..... 1.8

#### Labor force (Top 4) – 1995

Services .....	43,400	Government (Federal, Military) .....	13,400
Retail Trade .....	22,100	State & Local Government .....	11,800

**Sources:** Maryland Vital Statistics, 1999  
Maryland Department of Planning, 1995, 1998, 1999

## Focus Area 1 - Reducing the Effects of Asthma

### Definition

Asthma is a chronic lung disease characterized by airway constriction, mucus secretion, and chronic inflammation, resulting in reduced airflow and wheezing, coughing, chest tightness, and difficulty breathing (Healthy People 2010). For a person with asthma, everyday things can trigger an asthma attack, such as air pollution, allergens, exercise, infections, emotional upset, or certain foods. Typical symptoms of asthma include coughing, wheezing, tightness in the chest, difficulty breathing, a rapid heart rate and sweating. Children with asthma often complain of having an itchy upper chest or develop a dry cough, which may be the only sign of asthma.

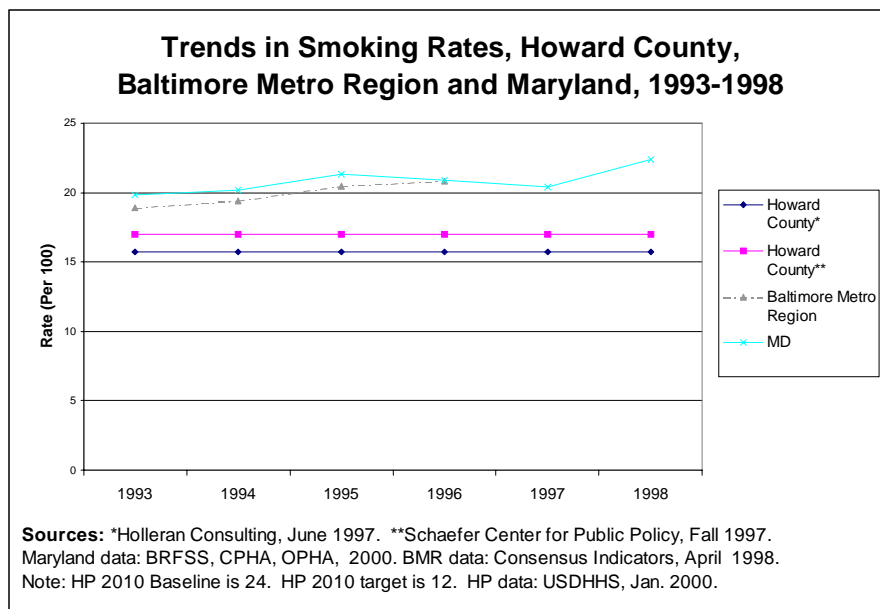
### Problem

The American Lung Association (1999) estimated that there are 188,974 adults in Maryland with asthma. The estimated prevalence of asthma in children age birth to 19 years is 7% of the general population. Therefore, in Howard County, the estimated prevalence of asthma is 3,663 persons under the age of 19. In Howard County Public Schools, 6.89% of the students have asthma. The asthma rate in Howard County Head Start children is 18%. While the number of adults with asthma is greater than the number of children with asthma, the asthma rate is rising more rapidly in preschool-age children than in any other group (Healthy People 2010).

### Determinants

According to the Asthma in America Survey (1998), asthma affects an estimated 15 million Americans, more than five million of whom are under the age of 18. The American Lung Association (1999) reports that asthma is the most common cause of chronic illness in children, resulting in more school absences and hospitalizations than any other condition. More than 95,000 Maryland children live with asthma.

Minority children are disproportionately affected. African-Americans are especially at risk for asthma. Children and adults in all racial groups have experienced substantial increase in asthma incidence over the last two decades. The number of people with asthma increased by 102% between 1979-80 and 1993-94 (Healthy People 2010).



Factors associated with increased prevalence of asthma include:

- Environmental factors, including indoor air quality and environmental tobacco smoke;
- Patient compliance;
- Access to care; and
- Socio-economic status.

While the reasons for the increased prevalence are not well understood, many factors that contribute to asthma's severity can be addressed. In this way, the toll of the disease can be reduced.

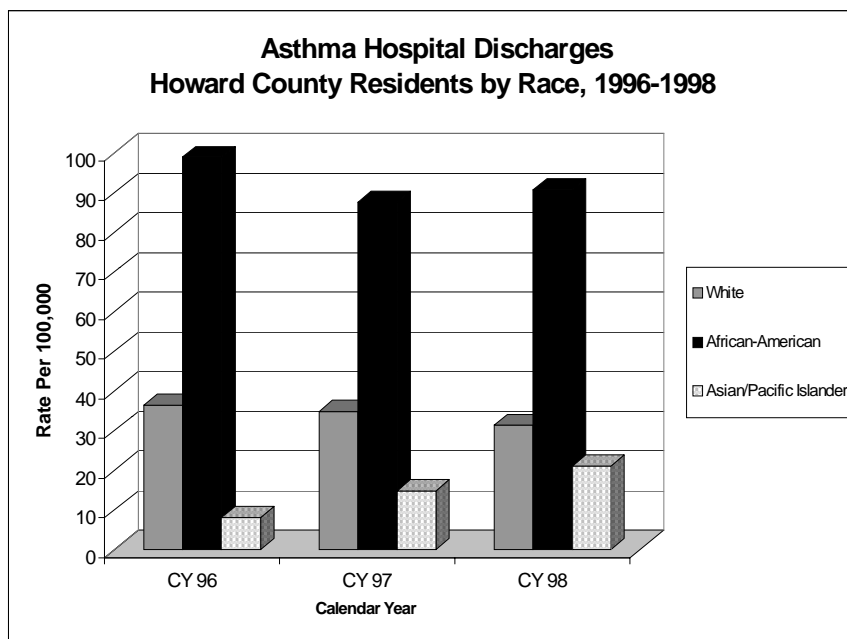
Effective management of asthma comprises four major components:

- Assessment and monitoring;
- Controlling exposure to factors that trigger asthma episodes, including environmental tobacco smoke;
- Adequately managing asthma with medication tailored to the severity of the disease; and
- Educating asthma patients to become active partners in their own care.

Asthma patients need to be able to recognize the signs and symptoms of uncontrolled asthma and know how to respond appropriately.

### High-Risk Sub-Population:

Reduce the disparity between white, African-American and Hispanic populations in Howard County. Although asthma is a chronic disease that presents itself most often with emergency room visits, analyzing the race disparity of hospital discharges due to asthma is also helpful. African-Americans are seen more than twice as often in Howard County as whites, and about four times as often as Asian/Pacific Islanders among Howard County residents.



**Source:** DHMH, OPHA, HSCRC Hospital Discharge Data, 2000.



**Objective 1** - By 2001, form a coalition to address asthma in Howard County. (Baseline: developmental)

### **Action Step**

- ⇒ Recruit members, including: consumers, family members, managed care organizations (MCOs), healthcare providers and their staff, school system (health educators, nurses), caregivers, media representatives, and legislators.

**Objective 2** - By 2003, develop tools that would allow effective assessment and monitoring of provider care and patient compliance using the National Asthma Education and Prevention Program (NAEPP) Guidelines for Diagnosis and Management of Asthma (1997). (Baseline: Developmental)

### **Action Steps**

- ⇒ Collect baseline surveys on asthma in Howard County (i.e. number of School Health Services visits and zip code analysis of hospital admissions and emergency room visits).
- ⇒ Analyze data from existing surveys.
- ⇒ Develop other surveys as needed. Survey indicators will explore number of people affected, demographics, payor status, interventions used, costs, provider care, use of preventive and rescue medications, patient compliance, and where services are provided for the uninsured.

**Objective 3** - By 2006, link 70% of existing partners (10) in the treatment and management of patients with asthma according to NAEPP Guidelines.

### **Action Steps**

- ⇒ Monitor provider care and where services are provided for the uninsured.
- ⇒ Develop an Asthma Management Office Visit Protocol to monitor provider care with physicians, National Institutes of Health (NIH), the Department of Health and Mental Hygiene (DHMH), insurance companies, and MCOs. This will then assure complete and appropriate asthma care in physicians' offices which will reduce hospitalization and emergency room use.
- ⇒ Provide education to health care providers, pharmacies, and consumers on the difference between maintenance and rescue medications.

**Objective 4 -** By 2005, improve asthma management in schools.  
(Baseline: Developmental)

**Action Steps**

- ⇒ Coordinate collaboration between physicians and School Health Services with asthma management plans.
- ⇒ Explore the linkage between Howard County General Hospital and Howard County Public Schools in assuring that students seen in the emergency room have asthma management plans forwarded to their schools.

**Objective 5 -** By 2010, 25% of schools within Howard County Public Schools will have designated School Environmental Teams to improve the environmental factors affecting the quality of life of persons with asthma.

**Objective 6 -** By 2010, institute a “Master Home Environmentalist” program in five high-risk neighborhoods where residents are hired and trained to conduct home assessments of identified families in their communities.

**Objective 7 -** By 2006, conduct two educational campaigns on environmental factors affecting the quality of life of persons with asthma.

**Action Steps**

- ⇒ Implement a secondhand smoke campaign with the Child Care Resource Center targeting Head Start Centers, Public/Private Day Care Centers and Licensed Providers.
- ⇒ Submit press releases to the local media to increase the awareness of the effects of outdoor pollution (i.e. “Ozone Action Days”) on asthma.

**Objective 8 -** By 2004, collaborate with the Coalition for a Smoke-Free Howard County to increase efforts related to environmental tobacco smoke.

**Action Steps**

- ⇒ Increase public policy efforts related to environmental tobacco smoke in the home and workplace.
- ⇒ Provide education about environmental tobacco smoke.

**Objective 9** - By 2003, provide 30 asthma education programs.

**Action Steps**

- ⇒ Child Care Resource Center: Implement Sesame Street “A is for Asthma,” a program for providers, parents, and four-year-olds.
- ⇒ Schools: Implement “Open Airways for Schools,” designed for administration, faculty and staff, and third through fifth graders with asthma. Coordinate use by Hospital Community Outreach programs, home visiting by Public Health Nurses, and others.
- ⇒ Providers: Present educational sessions in venues where pediatricians and family physicians are already in attendance, such as hospital staff meetings, specialty society, and Medical Society meetings.
- ⇒ Patients: Provide education about environmental allergens and how to decrease exposure.

**Objective 10** - By 2008, present additional opportunities for health care professionals to become better trained in asthma management.

**Action Steps**

- ⇒ Include asthma-related articles in medical newsletters.
- ⇒ Provide an educational session for health care professionals to become certified in Asthma Education, available through the American Lung Association.

**Objective 11** - By 2007, regulate pesticide use in public housing.

**Objective 12** - By 2008, resurvey after implementation of plan described above to observe results.

## Partners

Allergy and Asthma Foundation • American Lung Association • Child Care Resource Center • Coalition for a Smoke-free Howard County • Osteoporosis Diagnostic and Monitoring Center • Community Action Council • Howard County Board of Education • Howard County Health Department • Howard County General Hospital • Howard County School Health Council • Office of Children's Health, DHMH • Patuxent Medical Plan

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## Focus Area 2 - Preventing Diabetes and its Complications

### Definition

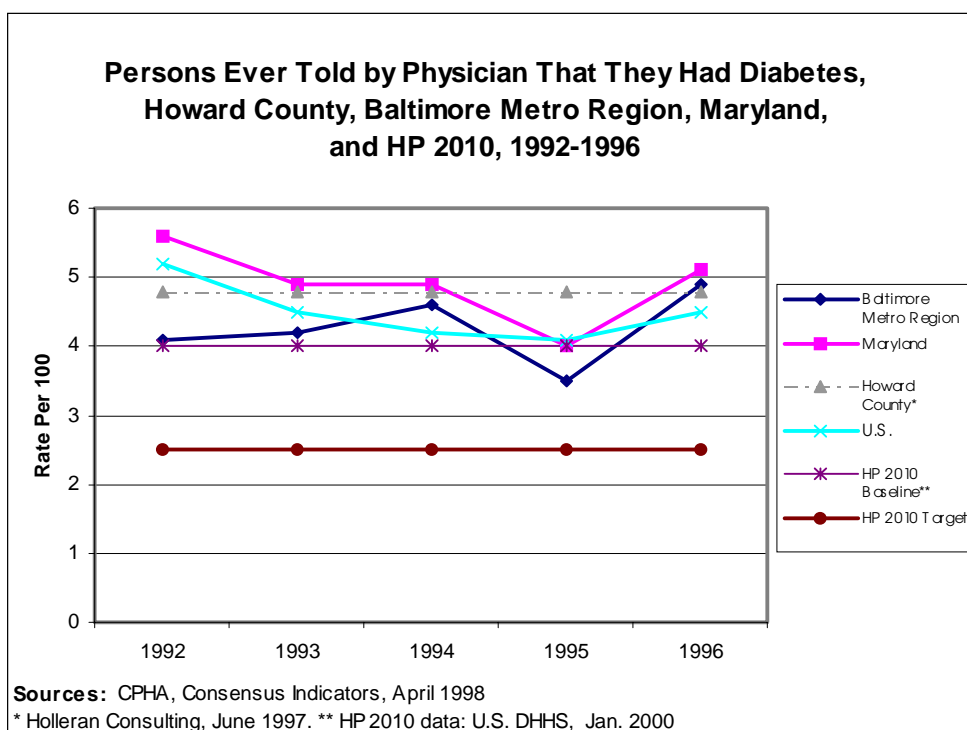
*Diabetes mellitus* is a chronic disease due to problems with insulin. Without proper treatment, complications can develop with the heart, nerve, foot, eye, and kidney.

Type 1 diabetes represents clinically about 5% of all persons with diagnosed diabetes. Its clinical onset is typically at ages under 30 years. Insulin therapy is always required to sustain life and maintain diabetes control for Type 1 diabetes.

Type 2 diabetes is the most common form of diabetes in the United States and the world, especially in certain racial and ethnic groups and in older persons. In the U.S., approximately 95% of persons with diagnosed diabetes (10.5 million) and almost 100% of persons with undiagnosed (5.5 million) diabetes probably have type 2 diabetes (Healthy People 2010, CDC and NIH data).

### Problem

According to the American Diabetes Association, an estimated 300,000 men, women and children in Maryland have diabetes, although approximately one-third do not know they have the disease. Left undiagnosed or untreated, diabetes can lead to heart disease, blindness, kidney failure and amputations. In Howard County, it is estimated that 13,030 people have diabetes. Of these 8,548 are diagnosed and 4,482 are not.



In Howard County, at least 97 children have been diagnosed with diabetes. Older people living in Howard County are greatly affected by this disease, as 2,977 people aged 65 and older have diabetes. There are 663 new cases of diabetes.

## Determinants

The mortality and morbidity of diabetes in Howard County includes the following: each year, there are 156 deaths, 56 amputations, 10 to 20 new cases of blindness caused by diabetes, and 82 people on dialysis or receiving a kidney transplant. The annual economic cost of diabetes in Howard County is staggering: \$36,598,290.12 in direct costs, \$44,731,243.48 in indirect costs, yielding a total of \$81,329,533.60 (American Diabetes Association).

High-risk groups include African-American, Hispanic, and American Indian populations. Risk factors are having a first-degree relative with diabetes, being obese, hypertensive and having a low high-density lipoprotein (HDL) cholesterol level and/or high triglyceride level.

In Howard County, 40.8% of adult males and 27.1% of adult females were overweight according to a Howard County Health Department Survey (1997; Sample size was 638). Only 4.8% reported having diabetes, half the number of those estimated to have diabetes. Almost 64% of those with known diabetes were not taking adequate care to control it. Of those surveyed, 50% of males and 50% of females with diabetes were overweight; 35% had high blood pressure; 60% added salt at the table; 39% ate two or more servings of high fat food per day; and 55% ate fast food more than once per week.

The same survey also indicated that 20% of those surveyed never exercised, and another 34% exercised less than three times a week. Thirty-four percent ate two or more servings of high-fat food daily, and only 13% ate five servings of fruits and vegetables daily. When asked why they do not eat fruits and vegetables, survey respondents answered that other food was more convenient (52.5% answered yes, 46.9% answered no); fruits and vegetables are too expensive (15.3% yes, 83.7% no); fruits and vegetables are not available (11.9% yes, 87.8% no); and respondents did not like the taste (11% yes, 87.7% no). This was self-reported information, and self-reporting generally under-represents risk factors.

Diabetes is the oldest known chronic disease in medicine, mentioned as far back as 1500 B.C. It is largely preventable and manageable but remains a problem due to three crucial issues:

- 1) We are not able to reduce the primary risk factor, i.e., obesity. Nationwide, obesity in adults and children is increasing every year.
- 2) We are not able to detect cases early enough. One-third to one-half of the cases of diabetes in Howard County do not know that they have the disease.
- 3) Also, we are not managing the known cases adequately. The 1997 Howard County survey clearly shows that 64% of cases are not providing adequate self-care.

## Obesity

*Healthy People 2010 Objective: Reduce the proportion of adults who are obese. (Target: 15%; Baseline: 23% of adults aged 20 years and older were identified as obese (Body Mass Index of 30 or more) in 1988-1994.*

In Howard County, 40.8% of male and 27.1% of female respondents to the Howard County Health Department Survey (1997) were overweight by 120% of median.

## High-Risk Sub-Populations

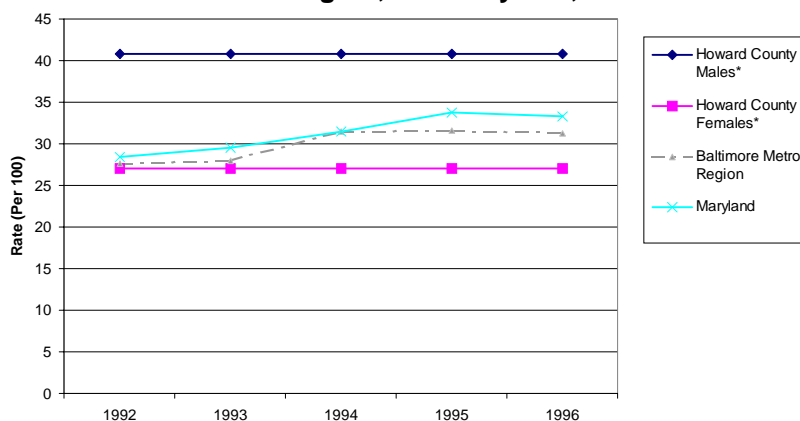
*Healthy People 2010 Objective: Reduce disparity between white and other populations in Howard County. As additional county-specific data becomes available through implementation of this plan, efforts will be undertaken to address the disparity between white and other populations.*

**Objective 1** - By 2003, develop tools that would allow effective assessment and monitoring of provider care and patient compliance of diabetes. (Baseline: Developmental)

## Action Steps

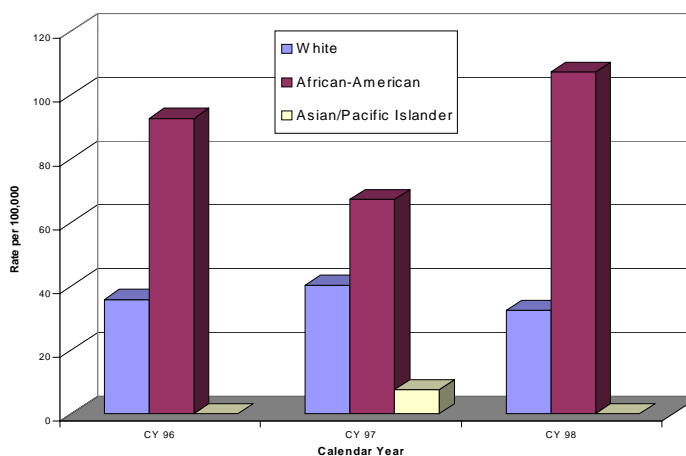
- ⇒ Collect baseline surveys on diabetes in Howard County (i.e. zip code analysis of hospital admissions and emergency room visits).
- ⇒ Develop other surveys as needed. Survey indicators to include number of people affected, demographics, payor status, interventions used, costs, provider care, medications used, patient compliance, and services provided for the uninsured.
- ⇒ Analyze data from existing surveys.

**Overweight by 120% of Median, Howard County, Baltimore Metro Region, and Maryland, 1992-1996**



Sources: CPHA, Consensus Indicators, April 1998. \*Holleran Consulting, June 1997.  
Note: HP 2010 baseline is 23, HP 2010 target is 15. HP 2010 data: U.S. DHHS, Jan. 2000.

**Diabetes Hospital Discharges  
Howard County Residents by Race, 1996-1998**



Source: DHMH, OPHA, HSCRC Hospital Discharge Data, 2000

**Objective 2** - By 2002, initiate public education in Howard County targeted to reach 90% of the adult population about the seriousness, costs and risk factors associated with diabetes, emphasizing the risk between obesity and diabetes.

### **Action Steps**

- ⇒ Form a public awareness committee consisting of relevant partners. Collect relevant material, and develop a strategy for the campaign.
- ⇒ Develop press releases, cable ads, and a Web page.
- ⇒ Coordinate a Speakers Bureau to provide presentations to various community groups.
- ⇒ Distribute educational information through employers, church groups, and other community organizations.
- ⇒ By 2006, evaluate the public education campaign to assess the impact it has made on the public and modify the strategy accordingly.

**Objective 3** - By 2010, reduce the risk of diabetes in Howard County by decreasing the incidence of obesity in children under the age of 18 by 10%. (Baseline: Developmental)

### **Action Steps**

- ⇒ Increase the availability of and participation in non-competitive physical activity through collaboration with existing community agencies.
- ⇒ Increase children's awareness of healthy eating by refining the nutrition education component already in the school curriculum.

**Objective 4** - By 2003, advocate for screening of 90% of the at-risk population for diabetes.

### **Action Steps**

- ⇒ Advocate for diabetes screening to be offered in every routine health care visit by primary care physicians through health department mailings targeted at physicians in Howard County.
- ⇒ Advocate for insurance companies to cover routine screening of diabetes.



**Objective 5** - By 2002, increase the availability of diabetes education meeting criteria set by the American Academy of Clinical Endocrinologists for both professionals and the public by 30 programs.

### Action Steps

- ⇒ Provide “lunch and learn” seminar for health care professionals.
- ⇒ Provide scholarships for newly diagnosed diabetics to attend eight hours of diabetes education within three months of diagnosis.
- ⇒ Newly diagnosed diabetics will receive a brochure from their health care providers describing therapeutic and non-therapeutic measures, and the consumer’s and physician’s responsibilities.
- ⇒ Increase the number of diabetes education programs available through employers.

**Objective 6** - By 2003, provide educational campaigns on testing schedules according to the American Association of Clinical Endocrinologists guidelines.

**Objective 7** - By 2008, after implementation of plan, resurvey to observe results.

### Partners

Columbia Association • Howard County General Hospital • Howard County Health Department • Howard County Public Schools • Howard County School Health Council • Patuxent Medical Plan

### References

- American Diabetes Association. (2000, January). American Diabetes Association: Clinical practice recommendations 2000. *Diabetes Care*, 23, Supplement 1.
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### Cross-Reference Table for Howard County

*See Also*

Child and Adolescent Health .....	33
Chronic Disease .....	47
Environmental Health .....	51

# KENT COUNTY

## Selection of Focus Area

Information routinely gathered by the Communicable Disease staff of the Kent County Health Department reflects an increase in sexually transmitted disease rates, especially Chlamydia, in Kent County in recent years. This information has prompted concern and action by the Health Officer, the Kent County Health Department's Executive Committee, and the School Health Council.



### DEMOGRAPHIC OVERVIEW

#### Estimated Population, by Race – 1998

Total .....	18,930
White .....	73.8%
Other .....	26.2%

#### Estimated Population, by Age – 1998

Under 1 .....	190	18-44 .....	6,690
1-4 .....	840	45-64 .....	4,460
5-17 .....	3,230	65+ .....	3,520

All causes Mortality Rate (age-adjusted, per 100,000 population) 1996-1998 ..... 483.0

Infant Mortality Rate 1995-1999 ..... 6.1

Estimated Mean Household Income – 1999 ..... \$60,600

Estimated Median Household Income – 1999 ..... \$42,000

Civilian Unemployment Rate, Annual Average – 1999 ..... 3.8

#### Labor force (Top 4) – 1995

Services .....	3,500	Manufacturing .....	1,000
Retail Trade .....	1,700	Government (Federal, Military) .....	900

**Sources:** Maryland Vital Statistics, 1999  
Maryland Department of Planning, 1995, 1998, 1999

## **Reducing Sexually Transmitted Diseases (STDs) in Teens**

### **Problem**

Sexually Transmitted Disease (STD) rates, especially chlamydia, have escalated in Kent County in recent years. Increased rates reflect only those who have symptoms or are contacts of symptomatic cases

### **Determinants**

The adolescent propensity for risk-taking behaviors necessarily lends itself to sexual experimentation, although there does appear to be a growing trend toward abstinence. This sexual experimentation, when coupled with the use of mind-altering chemicals, easily leads to situations which include unprotected sex as well as multiple sex partners. Efforts to address these issues have met with some success: research indicates that the most effective school-based programs are comprehensive ones which include an emphasis on abstinence and condom use. However, of the estimated 15 million new cases of STDs identified annually in the United States, approximately four million occur in the adolescent population.

Chlamydia is a newly emergent bacterial STD that attacks the high school and early college age group almost exclusively. Fifty percent of infected males have some urinary tract symptoms; females are usually asymptomatic. It is easily diagnosed by the non-invasive Ligase Chain-Reaction (LCR) urine test and easily treated with a single dose of Zithromax (concomitant gonorrhea responds to a single dose of Suprax). Chlamydia can cause long-term complications, like gonorrhea, but its presence also indicates that its victims are having unprotected sex, thereby inviting the spread of HIV in that vulnerable population.

Chlamydia rates throughout Maryland have risen from 160.8 per 100,000 population in 1996 to 173.8 in 1998. For Kent County, the rate has gone from 175.7 to 209.9 for the same period. Although ranked last in total population, Kent ranks ninth in chlamydia rates.

Twenty percent of the Kent County cases came to the Kent County Health Department from the Washington College student population. Additional data documented cases among at least 60 high school-age males and females in Kent, Caroline, and Queen Anne's counties. One female in Caroline County named 33 contacts, a Kent County female named 19, and a Queen Anne's female named 11. Contact among the three groups was evident.

**Objective 1** - By 2010, establish an efficient clinical system to diagnose, treat, and prevent chlamydia and gonorrhea infection among middle and high school students of Kent County.

### **Action Steps**

- ⇒ Meet with local officials (especially school and health) to establish the clinical system needed to diagnose chlamydia.
- ⇒ Establish a process for procuring needed supplies to offer the Ligase Chain-Reaction (LCR) urine test or other appropriate urine testing.
- ⇒ Determine the procedure for mailing specimens to designated testing lab.

**Objective 2** - By 2010, the rates of chlamydia will not be more than 2% of the adolescent population. (Baseline: a peak rate of 20% is expected in the first year, reduced to 5% by the end of the third year and staying 2%, thereafter.)

### **Action Steps**

- ⇒ The School Health Council will develop the content of a pamphlet defining sexual activity, describing the chlamydia epidemic, and directing teens to sources of LCR or other appropriate urine testing, disease treatment, and prevention.
- ⇒ Final approval for the pamphlet will rest with the Board of Education and the County Health Officer.
- ⇒ Pamphlets will be available in all school health suites and libraries and through private physicians.
- ⇒ Educate diagnosed cases to the dangers of unprotected sex.

**Objective 3** - By 2010, establish a library of informational pamphlets on the various consequences associated with sexual activity.

### **Action Steps**

- ⇒ Provide such informational pamphlets in the health suites of the county high school and middle schools.
- ⇒ Provide such informational pamphlets in the libraries of the County high school and middle schools.

**Objective 4 -** By 2010, a system will be in place to introduce the pamphlets and their contents to all ninth grade health classes.

### **Action Steps**

- ⇒ Provide in-service training to all teachers and guidance personnel who deal with these topics/issues.
- ⇒ Host a community forum to discuss the topics/issues and educate parents and the general public on the problems associated with the epidemic.
- ⇒ Repeat efforts annually with other special target groups, including teen pregnancy prevention clients, guidance counselor referrals, mental health and addiction counselors, and others.

**Objective 5 -** By 2010, the LCR or other appropriate diagnostic urine test will be given as a routine part of every sports physical and other adolescent examination. Current efforts include voluntary testing only.

### **Action Steps**

- ⇒ Provide LCR test kits to all health suites in the County high school and middle schools.
  - ⇒ Meet with all private physicians/nurse practitioners to encourage them to administer the LCR diagnostic urine tests to all adolescents in their practices and to educate them to the need for reporting positive test results for treatment and contact tracking.
  - ⇒ Provide LCR diagnostic urine test kits to all private physicians/nurse practitioners in the County.
- 

### **Partners**

Kent County Board of Education • Kent County Health Department • Kent County Local Management Board • Kent County School Health Council

## References

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### Cross-Reference Table for Kent County

#### See Also

Child and Adolescent Health .....	33
HIV .....	65
Sexually Transmitted Diseases.....	126

# MONTGOMERY COUNTY

## Selection of Focus Area

In 1998 the Montgomery County Department of Health and Human Services convened a symposium on maternal and child health to increase awareness of the disparity in infant mortality between African-American and other County residents. The community identified reducing African-American infant mortality as a priority and established the African-American Health Initiative to work toward eliminating the disparity in infant mortality as well as other health status disparities.



Other Montgomery County focus areas include increasing access to care for low-income, uninsured residents; reducing substance abuse, especially among adolescents; helping young people make smart lifestyle choices; reducing family violence by providing support to high-risk families; reducing asthma hospitalizations among children, especially minorities; reducing HIV infection rates, especially among African-Americans; reducing incidence and complications of diabetes, especially among African-Americans; reducing risk behaviors for oral cancers, especially among African-Americans; and increasing access to oral health care.

### DEMOGRAPHIC OVERVIEW

#### Estimated Population, by Race – 1998

Total .....	840,880
White .....	73.4%
Other .....	26.6%

#### Estimated Population, by Age – 1998

Under 1 .....	11,940	18-44 .....	360,230
1-4 .....	44,660	45-64 .....	182,830
5-17 .....	142,850	65+ .....	98,370

All causes Mortality Rate (age-adjusted, per 100,000 population) 1996-1998 ..... 340.7

Infant Mortality Rate 1995-1999 ..... 6.8

Estimated Mean Household Income – 1999 ..... \$91,300

Estimated Median Household Income – 1999 ..... \$68,100

Civilian Unemployment Rate, Annual Average – 1999 ..... 1.8

#### Labor force (Top 4) – 1995

Services .....	216,200	Retail Trade .....	77,600
Government (Federal, Military) .....	88,800	Finance, Insurance, Real Estate .....	51,900

**Sources:** Maryland Vital Statistics, 1999  
Maryland Department of Planning, 1995, 1998, 1999

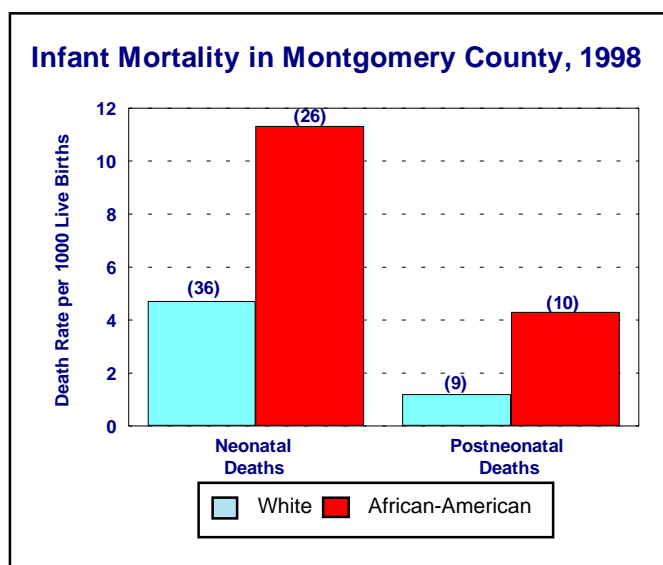
## Reducing African-American Infant Mortality

### Definition

Infant mortality is defined as deaths occurring any time between the date of birth and the first birthday. Causes of death in the first 28 days of life ("neonatal" deaths) are most often due to or associated with premature birth and/or very low birth weight. Severe congenital abnormalities also cause a significant portion of deaths in young infants. Deaths occurring between 29 days and one year of age ("postneonatal" deaths) are due to a wider variety of causes, including Sudden Infant Death Syndrome and infection, in addition to the causes of neonatal mortality.

### Problem

From 1990 to 1998, the most recent figures available, the infant mortality rate among African-Americans in Montgomery County was about four times greater than among white infants. The County's African-American infant mortality rate has frequently exceeded the statewide rate. In 1998, there were 45 white infant deaths and 36 African-American infant deaths. Due to the difference in the size of the African-American population in the County (128,690) compared to the white population (617,460), the death rate per 1,000 live births for African-Americans was greater, 15.6 per 1,000 compared to 5.9 for whites. These rates exceed the federal Healthy People 2010 target of 4.5 per 1,000 live births.



Note: Actual numbers of deaths are in parentheses.

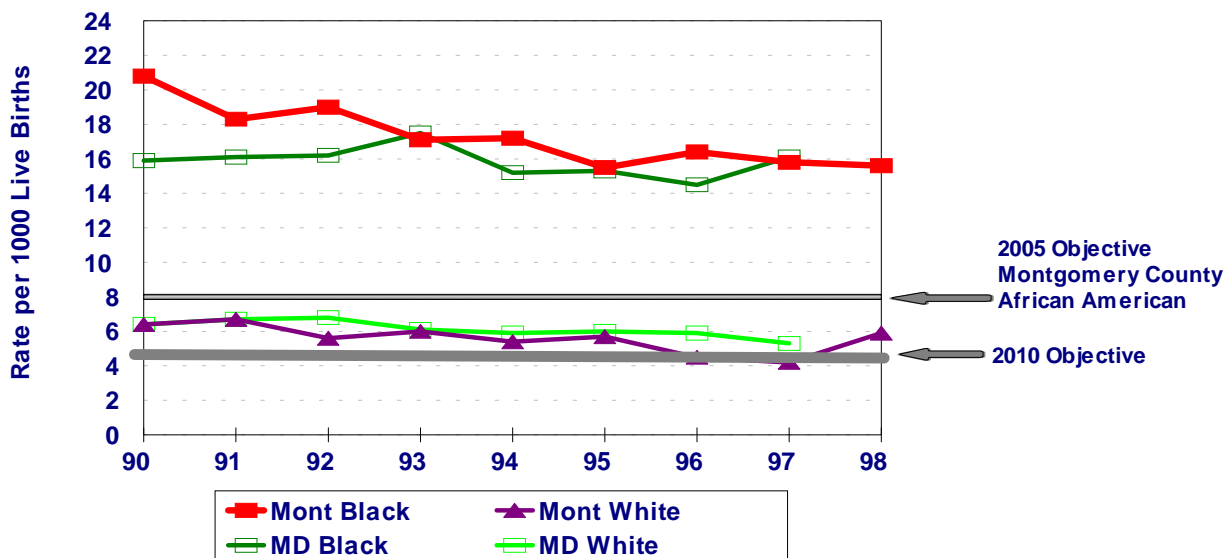
Source: Maryland Vital Statistics, 1998

### Determinants

Lack of prenatal care is strongly associated with an increased risk for low birth weight infants, preterm delivery, and maternal and infant mortality. Federal and State initiatives aim to increase access to prenatal care by expanding Medicaid eligibility. Montgomery County, through a partnership with Holy Cross Hospital, provides prenatal care for low-income, uninsured women not eligible for Medical Assistance. A smaller percentage of African-American women in Montgomery County, regardless of age, entered prenatal care in the first trimester in 1997 (the most recent year figures are available) compared to white women.



### Infant Mortality by Race Montgomery County and Maryland



Source: Maryland Vital Statistics Annual Report

Low birth weight is associated with a poor pregnancy outcome for both baby and mother. The majority of problems affecting newborns are related to prematurity; the earlier in gestation an infant is born, the greater risk. Low birth weight has a variety of causes, many of which are preventable, such as infection, inadequate prenatal care and poor nutrition. Maternal smoking is associated with a slight decrease in birth weight. A mother's low socio-economic status is also linked to her probability of having a low birth weight baby. However, any woman who fails to get good prenatal care, regardless of her socio-economic status, is at greater risk for having a low birth weight baby.

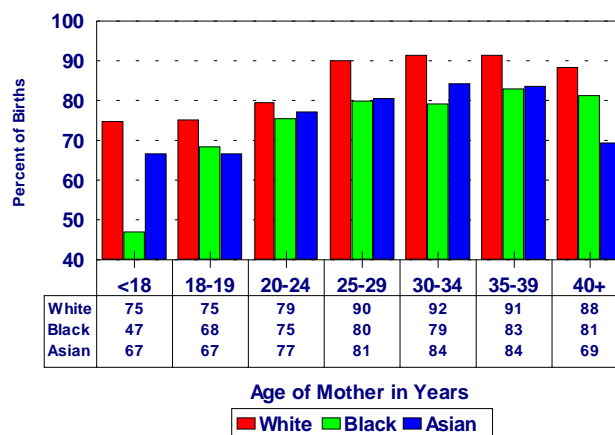
Except for teens, a larger percentage of African-American women in all age groups had low birth weight babies compared to white women in Montgomery County in 1997. One of the overarching goals of the proposed Healthy People 2010 is to eliminate all health disparities. Our goal for African-American infant mortality rate reflects this by challenging ourselves to reduce both the African-American and white infant mortality rates to the 2010 goal of 4.5 per 1,000 live births. To achieve the federal Healthy People 2010 target of 4.5 per 1,000 for African-Americans requires improving pre-pregnancy health, assuring excellent prenatal care and a safe delivery, and providing a sound social and medical environment for infants. These measures should also result in improved infant health and should lay the groundwork for successful education and a healthy, productive life.

To increase community awareness about the severity of this problem, Montgomery County convened a symposium on maternal and child health in 1998. In response, community groups organized the African-American Health Initiative to focus on improving infant mortality and other health problems where there was a significant disparity between African-American and other

county residents. The Montgomery County Department of Health and Human Services (DHHS) established a Fetal and Infant Mortality Review Board to review medical charts of women who suffered the loss of an infant to determine root causes. Public health officials began disseminating information on ways to reduce infant mortality, such as preventing Shaken Baby Syndrome and reducing Sudden Infant Death Syndrome (SIDS) deaths by placing infants on their backs to sleep. To ensure that all pregnant women can access prenatal care, DHHS, in a partnership with Holy Cross Hospital, provides prenatal care for low-income women ineligible for Medical Assistance.

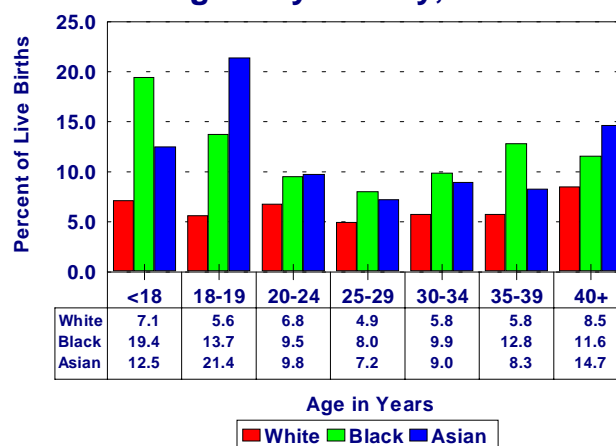
For optimal outcomes, young women need to be healthy prior to becoming pregnant. Community efforts and Montgomery County DHHS programs are directed toward improving nutrition, reducing substance abuse, delaying the age at first pregnancy, and providing an environment which enhances self-esteem and positive expectations for the future. The African-American Health Initiative is preparing a multimedia educational campaign targeted to increase African-American women's awareness of health issues important before conception to ensure a healthy baby.

### First Trimester Entry into Prenatal Care, Montgomery County, 1997



Source: MD Vital Statistics Annual Report

### Low Birth Weight, Montgomery County, 1998



Source: MD Vital Statistics Annual Report

While medical assessment is a well established component of prenatal care, psychosocial risk, such as domestic violence, substance abuse and social isolation, may be overlooked, or providers may be unaware of resources for women needing psychosocial interventions. The Montgomery County Department of Health and Human Services has partnered with County hospitals to provide each postpartum woman the opportunity before hospital discharge to meet with a community health nurse, who will assess and refer any infants who may benefit from the County's Infant at Risk or Healthy Start programs; offer referrals for home visiting and other support services for medical, psychosocial or parenting concerns; and provide educational materials.

**Objective 1-** Reduce African-American infant mortality from 15.6 in 1998 to 8.0 per 1,000 in 2005 and 4.5 per 1,000 in 2010.

### **Action Steps**

- ⇒ Identify causes of infant mortality: With assistance from the Maryland Department of Health and Mental Hygiene and from the State medical society, Montgomery County initiated a Child Fatality Review Board in 1997 and a Fetal and Infant Mortality Review Board in 1998. These multi-agency boards examine deaths to identify preventable factors to serve as a basis for policy changes in child safety and in the delivery of maternal and infant medical care.
- ⇒ Engage the community in reducing African-American Infant Mortality: The Montgomery County African-American Infant Mortality Coalition, a community group, meets regularly to address and direct actions to promote healthy childbearing and good infant care in African-American families. The coalition is planning a multi-media education campaign, and is working to increase physician awareness of available resources for high-risk pregnant women and to encourage routine screening for bacterial vaginosis.
- ⇒ Improve preconception health: For optimal outcomes, young women need to be healthy prior to becoming pregnant. The African-American Infant Mortality Coalition is preparing a multimedia educational campaign to improve nutrition, reduce substance abuse, delay the age at first pregnancy, and provide an environment which enhances self-esteem and engenders positive expectations for the future.
- ⇒ Assess risk during and after pregnancy: While medical risk assessment is a well established component of prenatal care, psychosocial risks, such as domestic violence, substance abuse and social isolation, may be overlooked or providers may be unaware of resources for women needing psychosocial interventions. Montgomery Babies is a public/private effort involving the Montgomery County DHHS, hospitals, and private social service agencies, to identify and intervene with at-risk families to ensure that risk factors are assessed and needed services provided. After a successful pilot at one hospital, a program that offers new mothers an assessment by a community health nurse with referrals as needed, will be expanded to include other county hospitals.
- ⇒ Promote infant health and safety: DHHS has developed community information campaigns, including brochures, cable TV shows and public presentations, to increase awareness among parents and infant caretakers about Sudden Infant Death Syndrome (SIDS) and Shaken Baby Syndrome. Parents identified through Montgomery Babies as needing help with substance abuse or other problems, will be referred to appropriate services to ensure that their babies are healthy and safe.

Partners

Adventist Health Care • Bowie State University • CASO America • Children’s Hospital Medical Center • Collaboration Council for Children, Youth and Families • Community Ministries of Montgomery County • Columbia Hospital for Women • Crossway Community • George Washington University • Grace Episcopal Church • Holy Cross Hospital • Hope for Kids • League of Women Voters, Montgomery County, Health Committee • March of Dimes National Capital Area • Montgomery County African-American Health Initiative • Montgomery County Commission on Health • Montgomery County Department of Health and Human Services • Montgomery County Public Schools • Montgomery General Hospital • Mt. Calvary Baptist Church • NAACP • National Council for Negro Women • National Institute of Child Health and Development • U.S. Office of Health Policy • Shady Grove Adventist Hospital • Uniformed Services University of the Health Sciences • University of Maryland • Women Glow International

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<b>Cross-Reference Table for Montgomery County</b>	
See Also	
Child and Adolescent Health .....	33
Maternal and Infant Health .....	96

# PRINCE GEORGE'S COUNTY



## Selection of Focus Area

Prince George's County has identified a number of important focus areas as primary public health concerns. They include: communicable disease control (STDs, TB, HIV/AIDS, rabies in animals, vaccine preventable diseases, food-borne diseases); substance abuse/mental health (addictions/mental health treatment services to women, children, adolescents and families); and access to care (expanding Healthline, other outreach activities, and community-based programs).

Additionally, infrastructure improvement and strategic health planning, including improvement of data management capabilities, have been included, along with reducing infant mortality, as areas to be included in the Health Improvement Plan.

### DEMOGRAPHIC OVERVIEW

#### Estimated Population, by Race – 1998

Total .....	777,810
White .....	37.4%
Other .....	62.6%

#### Estimated Population, by Age – 1998

Under 1 .....	11,940	18-44 .....	359,020
1-4 .....	42,560	45-64 .....	158,520
5-17 .....	144,170	65+ .....	61,600

All causes Mortality Rate (age-adjusted, per 100,000 population) 1996-1998 ..... 552.4

Infant Mortality Rate 1995-1999 ..... 12.0

Estimated Mean Household Income – 1999 ..... \$61,700

Estimated Median Household Income – 1999 ..... \$54,600

Civilian Unemployment Rate, Annual Average – 1999 ..... 3.5

#### Labor force (Top 4) – 1995

Services .....	107,600	Retail Trade .....	74,200
Government (Federal, Military) .....	83,800	State & Local .....	51,600

**Sources:** Maryland Vital Statistics, 1999  
Maryland Department of Planning, 1995, 1998, 1999

## **Focus Area 1 - Reducing Infant Mortality in Prince George's County**

### **Problem**

The death of an infant is considered an important indicator of health for a community. Over the past decade the infant mortality rate (IMR) in Maryland has been declining; however, the decline has been greater for white infants than for African-American infants. For every jurisdiction in Maryland and for the Nation as a whole, there remains a tremendous disparity in race-specific infant mortality rates (see graph), with African-American infants being more than twice as likely to die in the first year of life than their white counterparts.

In 1998, the IMR for white infants in Prince George's County (7.9) was higher than the Maryland rate (5.5) and the National rate (6.0) for white infants. Similarly, the IMR for African-American infants in Prince George's County (15.5) was higher than the State rate (15.3) and the National rate (14.1) for African-American infants. In Maryland, the leading cause of death for white infants is congenital anomalies, followed by low birth weight, maternal complications and respiratory distress syndrome. In contrast, the leading cause of death for African-American infants is low birth weight, followed by Sudden Infant Death Syndrome (SIDS) and congenital anomalies.

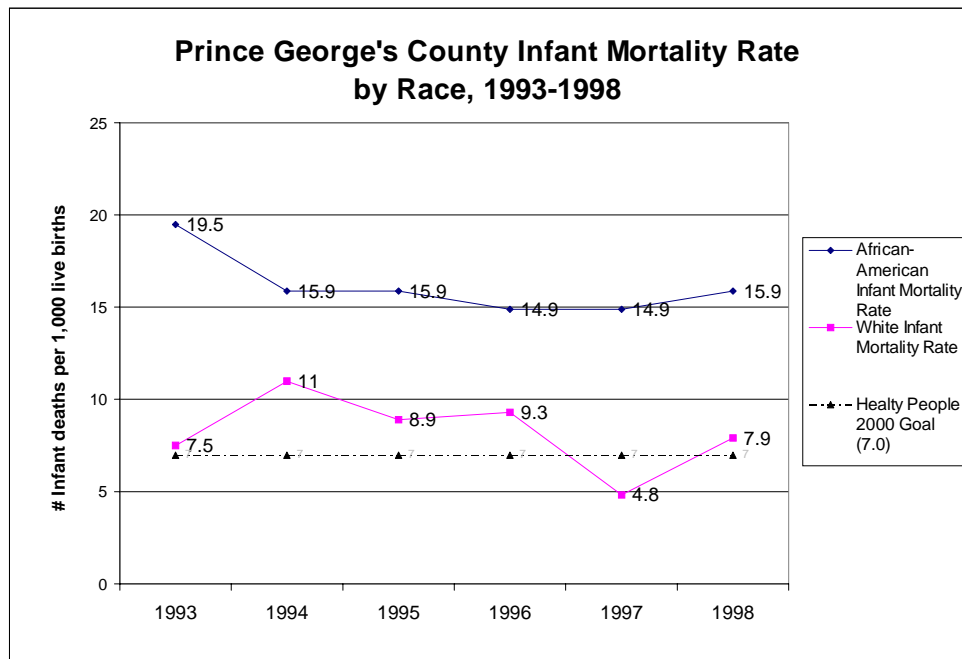
### **Determinants**

Among many factors associated with infant mortality, low birth weight is considered to be one of the most significant. In 1998, 1,244 Prince George's County babies (10.2% of the births) were born weighing less than five and one half pounds (2500 grams). More African-American babies had low birth weight (11.7% of births to African-Americans) than white babies (7.0% of births to white women). In Prince George's County, more than half of the infants who die each year are born very prematurely weighing less than 750 grams, a weight that corresponds to approximately 26 weeks of gestation. A key to reducing infant mortality in the County is to reduce the number of pregnancies that result in premature delivery and a very low birth weight infant.

Lack of early and appropriate prenatal care for pregnant women, particularly women who are at increased medical or social risk for poor pregnancy outcome, is also associated with poor pregnancy outcomes. In Prince George's County, in 1998, 77.8% of women giving birth received prenatal care in their first trimester. Disparities, however, existed between African-American and white women in this characteristic; 75.5% of African-American women, as opposed to 86.6% of white women, received prenatal care in their first trimester. The Healthy People 2000 goal is to increase to at least 90% the proportion of all pregnant women who begin prenatal care in their first trimester of pregnancy.

Sudden Infant Death Syndrome (SIDS) and other health factors are also associated with infant mortality. In 1998, 15 of the infant mortality cases in Prince George's County were attributed to congenital anomalies, and 14 to SIDS. Data from the "Study on the Impact of Managed Care on Access to Quality of Prenatal Care in Maryland" conducted by the Maryland Commission on Infant Mortality Prevention in 1997 indicates that among 349 women enrolled in either Medicaid

or commercial managed care programs who participated in the study, 70% of the Medicaid mothers reported that their pregnancies were unintended. The Healthy People 2000 goal is to reduce to no more than 40% the proportion of all pregnancies that are unintended. This study also showed that Medicaid mothers had more inadequate prenatal care than mothers enrolled in commercial managed care with regard to initiation of prenatal care and the number of prenatal visits. Substance abuse may also increase the risk of poor pregnancy outcomes, especially low and very low birth weights. Data from the Health Department's Infant At Risk Program, which provides services to at-risk pregnant women and mother-infant pairs, shows that of the 1,257 referrals made to this program in 1998, 218 (17%) women had substance abuse as a risk factor, and 283 (23%) reported having had no prenatal care. Prince George's Hospital Center statistics for this same year indicate that among the 2,840 infants delivered at the Hospital Center, there were 919 (32%) referrals to the Infant At Risk Program, and 124 of the mothers referred (13.5%) had a history of or a positive toxicology screen for substance abuse.



Source: Maryland Vital Statistics Annual Reports, 1993-1998

It is important to note that for many of the factors associated with infant mortality, accurate County specific data are often not available, for various reasons. Systems and procedures do not yet exist for capturing some of the needed data, not all health care providers are adequately trained or otherwise able to conduct thorough patient histories, and resources are insufficient to follow-up patients and providers to ensure that reports are accurate and complete. Consequently, even basic information such as client race, maternal education, parental alcohol and other substance abuse, birth weight, and other information may be inaccurately reported or altogether missing from crucial documents such as infant birth and death certificates. Data from medical record reviews of fetal and infant deaths are currently derived from too small a client population (30 record reviews in 1998, for example) to be able to draw conclusions or make recommendations for future action; however, these data suggest that factors such as pre-existing gynecological, nutritional and other health problems among women who lost their infants warrant additional study. Confounding the problem with data is the fact that approximately 59% of pregnant women who reside in Prince George's County deliver outside the County. Inaccurate or missing data continue to pose a significant problem for providers involved in planning strategies to address infant mortality in Prince George's County.

**Objective 1** - By 2005, increase to at least 90% the proportion of all pregnant women in Prince George's County who begin prenatal care in the first trimester of pregnancy. (Baseline: 77.8% in 1998)

### **Action Steps**

- ⇒ Conduct a community-wide multi-strategy information campaign to inform pregnant women of the importance of prenatal care and the resources available to them.
- ⇒ Use non-traditional approaches/sources such as beauty/nail salons, movie theatres, motor vehicle registration offices, housing complexes, businesses, churches, etc., as well as culturally competent resources (i.e. peer and near peer educators for adolescents, resource mothers, health promoters for Spanish speaking communities) to carry out or support educational/information programs promoting early and continuous prenatal care, and to assist pregnant women in obtaining prenatal care and other services.
- ⇒ Work with Members of the Catholic Charities Medical Care Community Partnership (MCCP) and other health/human service organizations to ensure that parents of children eligible for government health insurance programs receive medical coverage as well.
- ⇒ Work with the schools, the Health Department's Healthy Teens and Young Adults Program, Planned Parenthood, and other private and public resources to develop strategies to enroll pregnant adolescents and adolescents with children in the Maryland Children's Health Program (MCHP), and to ensure that pregnant adolescents receive early and on-going prenatal care.
- ⇒ Coordinate efforts with the Department of Social Services and other health and human service organizations to ensure that eligible pregnant women receive health insurance by enrolling in MCHP, information about the importance of prenatal care, and referrals to needed prenatal care and other services.
- ⇒ Through active membership on the Fetal and Infant Mortality Review (FIMR) Technical Review and Community Action Panels, strengthen linkages and coordination of services with existing community partners serving pregnant women and women of childbearing age. Identify new partners, such as correctional facilities, emergency room personnel, academic institutions, public and private school officials, county/municipal police departments, parks and recreation departments, pharmaceutical companies and pharmacies, religious leaders/organizations, community counseling services, census officials, dental care providers, etc., who can participate in the community effort to reduce infant mortality.



- ⇒ Coordinate efforts with local programs funded through the tobacco restitution initiative, substance abuse mini-grants, and the Centers for Disease Control and Prevention's (CDC) HIV/AIDS prevention grants, to promote prenatal care and eliminate the use of tobacco, alcohol, and illicit drugs by pregnant women.
- ⇒ Survey health and human service providers to determine the extent to which they can provide culturally and linguistically competent pre-conception, prenatal, and post-natal care to the County's diverse populations (i.e. diversity of staff, multi-lingual capabilities, appropriate educational materials and strategies).
- ⇒ Work with existing resources to identify strategies for involving fathers in promoting prenatal care for their pregnant partners.
- ⇒ Ensure that all women receiving pregnancy testing also receive education/information on the importance of prenatal care.
- ⇒ Continue promoting Healthline, a Health Department-sponsored toll-free telephone information, referral, and appointment setting service, to enhance access to care for pregnant women.

**Objective 2** - By 2005, increase to at least 90% the proportion of all live born infants whose mothers receive prenatal care that is adequate or more than adequate according to the adequacy of Prenatal Care Utilization Index. (Developmental objective: no County-specific data exists.)

### **Action Steps**

- ⇒ Conduct research to identify programs that have been successful in reducing infant mortality to determine program components that may be applicable to the County.
- ⇒ Ensure that all pregnant women with identifiable risks are offered case management services.
- ⇒ Conduct focus groups to learn more about women's perceptions of prenatal care and the barriers to accessing care, their knowledge of available services, and to obtain their ideas for improving the service delivery system.

**Objective 3** - By 2005, reduce to 30% or less the proportion of all pregnancies among women ages 15 to 44 that are unintended. (Baseline: 70% of pregnancies among women participating in the Study on the Impact of Managed Care on Prenatal Care in 1997— see previous reference—were unintended.)

### **Action Steps**

- ⇒ Provide age-specific and culturally/linguistically sensitive family planning materials in clinics and community settings throughout the County.
- ⇒ Promote public education about the benefits of family planning/contraception.
- ⇒ Strengthen linkages and coordination of services with existing community partners serving women of childbearing age (particularly MCHP recipients and adolescents) to ensure their unconditional access to and on-going family planning services throughout the childbearing years. Identify new partners, such as correctional facilities, academic institutions, pharmaceutical companies, religious leaders/organizations, community counseling services, etc., who can participate in the community effort to promote family planning.
- ⇒ Use non-traditional approaches/sources such as beauty/nail salons, movie theaters, motor vehicle registration offices, housing complexes, businesses, churches, etc., as well as culturally competent resources (i.e. peer and near peer educators for adolescents, resource mothers, health promoters for Spanish speaking communities) to carry out or support educational/information programs promoting use of family planning/contraceptive services.
- ⇒ Identify strategies to increase male involvement in family planning programs.
- ⇒ Continue promoting Healthline to enhance access to family planning services for women of childbearing age and their male partners.

**Objective 4** - By 2005, improve the quality and type of data collected on infant births and deaths in Prince George's County in order to fill current gaps in information and achieve a greater understanding of the underlying risk factors associated with infant mortality, including social, environmental, and other community conditions .

### **Action Steps**

- ⇒ Work with the Department of Health and Mental Hygiene, maternal and child health providers, and other health/human service organizations to identify current data gaps and future data needs, to identify and tap available data sources and technology, and to establish systems and procedures for collecting/obtaining and disseminating needed data related to infant mortality.

- ⇒ Utilize the findings of the FIMR Technical Review Panel to identify specific areas where information is lacking and to begin developing a more complete profile of mothers and fathers who lose their babies.
  - ⇒ Utilize home visitors or resource mothers to work with families who have lost babies in order to obtain information that is missing in reports on infant deaths.
  - ⇒ Use surveys, focus groups, or other assessment strategies with pregnant women (particularly women at risk of poor pregnancy outcomes) to gain information on the underlying risk factors associated with infant mortality.
- 

## Partners

American Association of University Women Identity, Inc. • Current Partners in the Prince George's County Fetal and Infant Mortality (FIMR) Technical Review and Community Action Panels • Family Advocacy Network • Maryland Department of Health and Mental Hygiene • Members of the Catholic Charities Medical Care Community Partnership (MCCP) • Mid-Atlantic Association of Community Health Centers • Pregnancy Aid Center • Prince George's Child Resource Center • Prince George's County Department of Family Services • Prince George's County Health Department • Prince George's County Local Management Boards • Prince George's Foundation • Prince George's Hospital Center • Priority Partners • Progressive Life Center • Southern Management Corporation • Spanish Catholic Center • Summit Health Institute for Research and Evaluation (SHIRE)

## **Focus Area 2 - Enhancing Infrastructure for Health Planning**

### **Problem/Determinants**

Beginning in 1991, the Prince George's County Health Department experienced significant reductions in County funding resulting from voter-imposed limitations on the County's taxing authority. To accommodate the loss of funds while maintaining essential public health services, Health Department Divisions were reduced, and highly-valued clinical, preventive, and specialty services were eliminated. During this time, the Health Department's planning functions were essentially "reactive," in that the agency was forced to reassess its priorities, shut down programs, restructure remaining services, and redirect and retrain staff. While the agency continued to monitor health trends, collect and analyze vital statistics, surveillance, and morbidity data, and track consensus indicators and leading causes of death, it lacked the professional, financial, and other resources necessary to carry out fundamental health planning activities such as community needs assessments.

While the period of downsizing was difficult, the Health Department emerged in the mid-1990s with a renewed focus on fulfilling its core public health and safety functions, including planning and assessment. The Division of Program Planning and Evaluation was created, and was assigned responsibility for agency-wide data management, strengthening relationships with community groups, the media, and other government agencies, and managing the Ryan White Title I planning process and grants for Suburban Maryland. Having laid the groundwork for on-going strategic health planning, the public information and planning functions of this Division were eventually incorporated into the Office of the Health Officer, and a Health Planner was hired in September 1999. The Health Department is currently making plans to undertake a community-wide needs assessment during the next eight to 10 months, to enhance its community partnerships, and to carry out other health planning activities as outlined in the Health Department's Local Health Plan for Fiscal Year 2000.

The goal is to establish by 2003 an ongoing strategic health planning process which:

- Is supported by up-to-date health related data and other scientifically sound evidence;
- Involves a broad range of community participants and engages the community to take action; and
- Results in the development of annual health improvement plans that are consistent with the Department of Health and Mental Hygiene's health planning efforts, the State Health Improvement Plan (HIP), and the Healthy People 2010 Initiative.

**Objective 1** - By 2001, complete a formal community-wide needs assessment and establish an ongoing needs assessment process through which local health needs and priorities are identified and reflected in the local health improvement plan.

### **Action Steps**

- ⇒ Hire a consultant/contractor to plan and carry out a comprehensive community needs assessment, to analyze the data, and formulate recommendations for the Health Department.
- ⇒ Facilitate meetings of community partners to guide the needs assessment process and develop a system for ongoing strategic health planning.
- ⇒ Hire additional health planning staff to coordinate health planning activities.

**Objective 2** - By 2003, improve the Health Department's data/public health information management capabilities to ensure that the health data collected is timely, accurate, accessible to interested individuals and community organizations, and relevant to the Health Department for reporting on health status and health system improvements.

### **Action Steps**

- ⇒ Fill the vacant biostatistician position.
- ⇒ Develop new and/or upgrade existing public health data systems and technology (i.e Geographic Information System), and train all Health Department staff assigned to data collection and management functions in their proper use.
- ⇒ Organize available health data to enhance their usefulness for health planning purposes (i.e. multi-year, jurisdictional, age group, and ethnic/demographic aggregates; race-adjusted rates, disparity comparisons, adjustments for small populations, and low incidence).
- ⇒ Work with DHMH and other Local Health Departments to identify current health information gaps, future data needs, data sources and technology, and to establish systems and procedures for collecting/obtaining and disseminating needed health information.

**Objective 3** - By 2001, establish a network of community partners reflecting the diversity of Prince George's County who will be involved on a continuous basis in strategic health planning activities for the purposes of developing strategies, policies, and programs to address community health needs.

### **Action Steps**

- ⇒ Train health planning staff in community development techniques to enhance their skills in community network/partnership development.
- ⇒ Expand the network of existing community partners to include representatives from culturally, linguistically, and ethnically diverse populations of Prince George's County, as well as non-traditional participants such as business, religious, and media representatives.
- ⇒ Hold regularly scheduled network meetings throughout the year to engage partners in specific health planning activities, and to carry out recommendations from the formal needs assessment.

**Objective 4** - By 2003, develop annual health improvement plans that reflect local needs and priorities identified through a formal needs assessment, and are linked with the State's Health Improvement Plan (HIP).

### **Action Steps**

- ⇒ Present results of the formal needs assessment to community partners and Health Department Directors to begin formulating health priorities, programs, policies.
- ⇒ Work with Directors of each Health Department Division to develop their sections of the local health improvement plan.
- ⇒ Continue serving on the Local Health Planning Advisory Committee and with other DHMH planning committees to coordinate local health planning efforts and the development of the local health improvement plan with the State's HIP.

### **Partners**

Will be identified through the formal needs assessment process, and will include representatives from hospitals, nursing home/assisted living facilities, other health and human service organizations, academic institutions, current Health Department grant recipients, community-based organizations, consumers, interested citizens, and non-traditional partners.

## Related Reports

- American Public Health Association. (1991). *Healthy Communities 2000: Model Standards* (3rd ed.). American Public Health Association.
- Maryland Department of Health and Mental Hygiene. (1999, May). *Summit report*. From Healthy Maryland Project 2010: Integrated Health Planning Summit.
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- Prince George's County Health Department. (1994, December). *Healthy Prince George's 2000: Healthy people in a healthy community*.
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- U.S. Department of Health and Human Services. (1997, September). *Developing objectives for Healthy People 2010*.
- U.S. Department of Health and Human Services. (1998, September). *Healthy People 2010 objectives* (Draft). Report draft. Washington, DC: U.S. Department of Health and Human Services, U.S. Government Printing Office.

### Cross-Reference Table for Prince George's County

#### See Also

Child and Adolescent Health .....	33
Maternal and Infant Health .....	96
Public Health Infrastructure .....	115

# QUEEN ANNE'S COUNTY



## Selection of Focus Area

Queen Anne's County Health Department pursues community health planning with community coalitions and councils that exist to promote well being in the community. In 1995, the "Families Acting to Build Responsive and Integrated Communities" (FABRIC) needs assessment process for Queen Anne's County was completed by the former regional Local Management Board. Through focus groups with children and families, this effort led to a comprehensive community plan recommending dissemination of information about resources and development of services to fulfill unmet needs.

Our 2010 Health Improvement Plan is derived from our liaisons in the community, the FABRIC plan, and from a survey that was completed in fall of 1999 by 125 individuals. Substance abuse was identified as a priority health issue for Queen Anne's County. Other health priorities include reducing tobacco use, reducing cancer morbidity and mortality, early childhood learning, reducing child abuse and neglect, and supporting long-term care.

### DEMOGRAPHIC OVERVIEW

#### Estimated Population, by Race – 1998

Total .....	39,680
White .....	84.1%
Other .....	15.9%

#### Estimated Population, by Age – 1998

Under 1 .....	450	18-44 .....	14,940
1-4 .....	2,060	45-64 .....	9,700
5-17 .....	7,400	65+ .....	5,130

All causes Mortality Rate (age-adjusted, per 100,000 population) 1996-1998 ..... 434.5

Infant Mortality Rate 1995-1999 ..... 11.1

Estimated Mean Household Income – 1999 ..... \$62,600

Estimated Median Household Income – 1999 ..... \$50,600

Civilian Unemployment Rate, Annual Average – 1999 ..... 2.9

#### Labor force (Top 4) – 1995

Retail Trade .....	3,300	Government (Federal, Military) .....	1,700
Services .....	3,200	State & Local Gov., Construction (tied) .	1,500

**Sources:** Maryland Vital Statistics, 1999  
Maryland Department of Planning, 1995, 1998, 1999



## Preventing Alcohol & Drug Use Among Youth

### Problem

Data from the 1996 Maryland Adolescent Survey and information obtained from a local survey conducted by the Combating Underage Drinking Coalition reveals that underage drinking is a problem in Queen Anne's County. In sixth grade, Queen Anne's youth self-reported using less marijuana, beer, and alcohol than the state average. However, according to the Maryland Adolescent Survey (1996), Queen Anne's 12<sup>th</sup> graders exceeded the state average in every category. In the survey conducted by the Combating Underage Drinking Coalition (2000), 40% of the 200 high school students surveyed reported consuming alcohol in the past 30 days and 12.5% reported consuming greater than 10 drinks in the past 30 days. In the same survey, 24% stated their parents had never discussed alcohol and/or drug use with them. Underage drinking and drug use undermines students' capacity to be successful in school. Parents are unaware of the critical role they have in shaping the health of adolescents.

### Determinants

The perception that substance abuse is a problem in Queen Anne's County is validated by statistical data. Data from the Behavioral Risk Factor Surveillance System for the Eastern Shore (1996) indicated that binge drinking (five or more drinks consumed at once, one or more times per month) has increased. The rate per 100 people increased from 28.6 in 1992, to 29.3 in 1993, to 30.5 in 1995. For chronic drinking (60 or more drinks per month), the rate increased from 3.1 in 1992 to 4.8 in 1995.

Data concerning youth and substance abuse is found in the U.S. Department of Education's Maryland Adolescent Survey (1996). These self-reported behavioral data portray Queen Anne's youth in sixth grade using less marijuana, beer, and other alcohol than the state average. However, by 12<sup>th</sup> grade, Queen Anne's students exceed the state average. Between sixth and 12<sup>th</sup> grade, the following increases were documented as "used in the past 30 days":

<b>Queen Anne's County Students Substances Used in Last 30 Days</b>		
<b>Substance</b>	<b>% of 6<sup>th</sup> Grade Students Reporting</b>	<b>% of 12<sup>th</sup> Grade Students Reporting</b>
Beer and wine (excluding religious use)	3.8	52.5
Liquor (rum, vodka, whiskey)	1.8	38.9
Five or more servings of alcohol on same occasion	0.6	40.9
Marijuana	1.5	28.2
LSD	1.1	8.4
<b>Source:</b> Maryland Adolescent Survey, 1996		

The Community Partnership for Children (Local Management Board) has mobilized the community to focus on three areas. Their vision is to:

- Create a community that supports family life;
- Create a community where children enter school ready to learn; and,
- Create a community where children are successful in school.

The Queen Anne's County Health Department is heavily invested in all three. The Maryland Children's Health Program; Women, Infants and Children (WIC); Healthy Start, Family Planning Services, Newborn Visits, Families First (Family Support Center), Adult Day Medical Services, and Adult Evaluation and Review Services, all support Family Life. In addition, the Health Department teaches "*Babysitting Basics*" and "*Never Shake A Baby*." Families First staff and nurses conducting newborn home visits and Healthy Families parent educators are introducing the Parents as Teachers curriculum entitled "*Born to Learn*" in an effort to develop children who enter school ready to learn.

The Health Department supervises nurses assigned to each school. Vision and hearing screening, diagnostic and advisory clinics, family planning services, prevention efforts, as well as the daily school nurse services support a community where children are successful in school. This Health Improvement Plan will fortify the efforts of the Community Partnerships for Children (Local Management Board). Substance abuse undermines family life and reduces students' capacity to be successful in school.

**Objective 1** - By 2010, decrease adolescents' perceptions that parents accept underage drinking and drug use as a norm from 24% in 2000 to 12%. (Source: Combating Underage Drinking Survey, Winter 2000)

**Objective 2** - By 2010, increase the number of parents' participation in a formalized parenting program from eight to 30 per year.

**Objective 3** - By 2010, decrease eighth graders' use of alcohol in the past 30 days from 19.6% of those surveyed in 1996 to 10%. (Source: Maryland Adolescent Survey, 1996)

### **Action Steps**

- ⇒ Initiate "*Parents Make a Difference*," an approach which empowers parents to recognize the impact of their values and behaviors, and to communicate clear expectations.
- ⇒ Conduct three, 12 to 14 week sessions of the "*Nurturing Program for Recovering Families*," by Stephen J. Bavalek, Ph.D., and Juliana Dellinger Bavalek, M.S.E., which deals with parenting skills and issues. Responsible parties: Health Department's Prevention Office and Family Support Center and the Department of Social Services.

- ⇒ Conduct two sessions of *“Preparing for Drug Free Years”* by Drs. J. David Hawkins and Richard F. Catalano. Responsible party : Health Department’s Prevention Office.
- ⇒ Conduct *“Parents Who Care — A Guide for Parents with Teens”* by Drs. J. David Hawkins and Richard F. Catalano, three groups per year. Responsible party: Health Department’s Prevention Office.
- ⇒ Provide 10 scholarships per year to high school students to attend Maryland’s Annual Alcohol and Drug Abuse Prevention Conference. Responsible party: Health Department’s Prevention Office.
- ⇒ Provide prevention literature of their choice to SADD (Students Against Destructive Decisions) and to Youth Rise for distribution to high school students. Responsible party: Health Department’s Prevention Office.
- ⇒ Publish information from the Maryland Adolescent Survey in three papers twice a year. Responsible party: Combating Underage Drinking in Queen Anne’s County Task Force.
- ⇒ Publish a twice-a-year collaborative report and send it to agencies, churches, parent groups, and the media regarding the incidence and impact of underage drinking and drug use. Responsible party: Combating Underage Drinking in Queen Anne’s County Task Force.
- ⇒ Conduct an after-school program which focuses on prevention of underage drug and alcohol use. Responsible party: Health Department’s Prevention Office.
- ⇒ Pursue funding for a comprehensive, after-school program. Responsible party: Community Partnerships for Children.
- ⇒ Maintain membership on the Middle School Task Force. Responsible party: Health Department’s Prevention Office.

Partners

Combating Underage Drinking Coalition in Queen Anne’s County • Families First • HotSpots Committee • Queen Anne’s County Children’s Council, Middle School Task Force • Queen Anne’s County Community Partnerships for Children • Queen Anne’s County Health Department

Related Reports

Families Acting to Build Responsive and Integrated Communities (FABRIC). (1995). Regional Mid-Shore Local Management Board.

Maryland Governor’s Office of Crime Control and Prevention. (1999, May). *Combating underage drinking*. Grant application.

Maryland State Department of Education. (1996). *Maryland adolescent survey*.

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<b>Cross-Reference Table for Queen Anne’s County</b>	
<i>See Also</i>	
Child and Adolescent Health .....	33
Substance Abuse Treatment .....	132

# ST. MARY'S COUNTY

## Selection of Focus Area

The St. Mary's County Health Department has given priority to a number of important public health issues for FY2000. They are:

1. Infant Mortality
2. Stroke Prevention
3. Accident Prevention
4. Cancer Screening
5. Heart Disease Prevention (including smoking prevention, diet, and exercise)
6. Oral Health
7. Improving Access to Health Care



### DEMOGRAPHIC OVERVIEW

#### Estimated Population, by Race – 1998

Total .....	87,670
White .....	80.1%
Other .....	19.9%

#### Estimated Population, by Age – 1998

Under 1 .....	1,210	18-44 .....	37,360
1-4 .....	5,840	45-64 .....	16,470
5-17 .....	18,940	65+ .....	7,850

All causes Mortality Rate (age-adjusted, per 100,000 population) 1996-1998 ..... 474.3

Infant Mortality Rate 1995-1999 ..... 9.1

Estimated Mean Household Income – 1999 ..... \$69,200

Estimated Median Household Income – 1998 ..... \$60,000

Civilian Unemployment Rate, Annual Average – 1999 ..... 3.1

#### Labor force (Top 4) – 1995

Services .....	11,600	Retail Trade .....	6,500
Government (Federal, Military) .....	10,000	State & Local Government .....	3,400

**Sources:** Maryland Vital Statistics, 1999  
Maryland Department of Planning, 1995, 1998, 1999

## **Promoting Oral Health**

### **Definitions**

Oral health means much more than healthy teeth. It means being free of chronic conditions, oral and pharyngeal cancers, tooth decay, periodontal disease, broken teeth or jaws, as well as the absence of developmental and congenital conditions such as cleft lip and palate.

### **Problem**

Oral health is integral to general health. Lack of proper oral health has major consequences for children and adults. A delay, or absence, of routine primary and preventative oral care can cause increased tooth decay, periodontal disease and the consequences that accompany these problems. Oral problems developed in childhood can lead to lifelong oral and even systemic complications. New research points to associations between periodontal diseases and lung and cardiovascular disease, stroke, low birth weight and premature delivery. An association between periodontal disease and diabetes has long been noted. Oral pain can greatly affect quality of life and restrict daily activities. Pain is a common symptom that accompanies many of the conditions which result from poor oral health. The burden of oral disease and conditions is disproportionately shared by people of vulnerable populations. Many of these problems and their treatments can undermine self esteem, discourage social interaction, and lead to chronic stress and depression.

### **Determinants**

St. Mary's County has faced the challenge of residents without access to needed oral care for some time. Many other factors contribute to produce an environment that promotes poor oral health. The Survey of the Oral Health Status of Maryland School Children, 1994-1995, found that 50% of kindergartners in Maryland had dental caries. St. Mary's County had the second highest rate in the State (58.9%). In general, many dentists refuse to accept Medicaid patients due to low reimbursement rates. Voluminous paperwork and managed care bureaucracy also made it difficult for dentists to accept Medicaid consignment. Historically, the St. Mary's County school system has had limited resources to implement primary prevention programs for school students such as screening and dental sealant applications. Additionally, lack of available public transportation has made it almost impossible for parents to bring their children to dental appointments. Even private sources of reimbursement for needed health care have not provided answers to lacking oral health care. Health Share, a voluntary non-profit agency, has only paid for acute emergency visits for the uninsured poor. To date, the public water supply in the County is not fluoridated.

Fortunately, since 1997, there has been a focused effort to improve and promote oral health in St. Mary's County. Yearly, since 1997, \$20,000 of local funds has been made available to treat dental problems. The Community and Public Health Administration's Office of Oral Health has provided \$30,000 yearly toward dental sealant programs in schools, and for treatment costs.

The Leonardtown Rotary Club has made dental health its “signature project” and has made funding available for fluoride rinse programs in six schools, and has promised to supply free tooth brushes and toothpaste to participating schools. In an effort to increase dentists’ participation in Medicaid, the St. Mary’s County Health Department has agreed to be the intermediary to assist dentists with reimbursement issues. The County Health Department has also made transportation available to anyone who needs it for dental services. Plans are underway to allow pick-up of parents from their work place and children from schools to transport them to dentists.

While all these initiatives are good news for St. Mary’s County, there remains much work and coordination to continue the strides that have been made since 1997. Without continued community education and coalition building, successes achieved will not be sustained.

**Objective 1 -** By 2010, develop a comprehensive primary prevention program for dental health in St. Mary’s County.

### **Action Steps**

- ⇒ The County Health Department and the Patuxent Dental Society will provide community education on the importance of regular check-ups, mouth care, and the importance of proper nutrition to 90% of the residents of St. Mary’s County.
- ⇒ The County Health Department and the Community Health Advisory Group will continue development of a community coalition to improve oral health.
- ⇒ Local dentists and the St. Mary’s County school system will continue screening of children in Head Start programs and in elementary schools for dental caries to achieve a goal of 75% of children.
- ⇒ The school system and the County Health Department will teach at least 90% of Head Start and elementary school children the three essential steps toward good oral health.
- ⇒ The school system, local dentists and the County Health Department will be responsible for placement of dental sealants on at least 80% of children in elementary schools.

**Objective 2 -** By 2010, improve access to dental care in St. Mary’s County.

### **Action Steps**

- ⇒ The State, St. Mary’s County Health Department, and the Maryland Health Care Foundation will provide basic dental coverage to 75% of uninsured adults under 250% of the federal poverty level and to 90% of children under 300% of the federal poverty level.

- ⇒ Health Insurance companies and the St. Mary's County Health Department will assure that 50% of local dentists will participate in the Medicaid dental program.
- ⇒ The County Health Department will provide transportation for 100% of dental patients without available transportation.
- ⇒ The County Health Department and local dentists will send reminders for dental appointments to 90% of enrolled Medicaid patients.
- ⇒ The County Health Department, Health Share and the Maryland Health Care Foundation will continue to provide prescription coverage to purchase medications at reduced rates to 75% of uninsured adults and to 90% of uninsured children in St. Mary's County.

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## Partners

Health Share of St. Mary's County • Leonardtown Rotary Club • Maryland Health Care Foundation • Medicaid Managed Care Organizations • Office of Oral Health, DHMH • Patuxent Dental Society • St. Mary's County Health Department • St. Mary's Public School System • Tri-County Dental Care

## Related Reports

Maryland Department of Health and Mental Hygiene, Office of Child Health; University of Maryland Dental School, Department of Pediatric Dentistry. (1994-1995). *Survey of the oral health status of Maryland school children, 1994-1995*.

Leonardtown Rotary Club. (n.d.). *Signature project report*.

Maryland Department of Health and Mental Hygiene. (1999, May). *Summit report*. From Healthy Maryland Project 2010: Integrated Health Planning Summit.

U.S. Department of Health and Human Services. (1998, September). *Healthy People 2010*. Washington, DC: U.S. Department of Health and Human Services, U.S. Government Printing Office.

U.S. Department of Health and Human Services. (2000). Executive summary. *Oral health in America: A report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health.

### Cross-Reference Table for St. Mary's County

See Also

Oral Health ..... 107



# SOMERSET COUNTY



## Selection of Focus Area

For 2001, Somerset County Health Department's priorities will include cancer, youth tobacco prevention and control, substance abuse, and entry into prenatal care for African-American females.

### DEMOGRAPHIC OVERVIEW

#### Estimated Population, by Race – 1998

Total .....	24,300
White .....	52.6%
Other .....	47.4%

#### Estimated Population, by Age – 1998

Under 1 .....	240	18-44 .....	10,530
1-4 .....	910	45-64 .....	4,860
5-17 .....	4,230	65+ .....	3,530

All causes Mortality Rate (age-adjusted, per 100,000 population) 1996-1998 ..... 574.5

Infant Mortality Rate 1995-1999 ..... 10.5

Estimated Mean Household Income – 1999 ..... \$35,700

Estimated Median Household Income – 1999 ..... \$31,800

Civilian Unemployment Rate, Annual Average – 1999 ..... 7.5

#### Labor force (Top 4) – 1995

Government (Federal, Military) .....	2,800	Services .....	1,400
State & Local Government .....	2,600	Retail Trade .....	1,200

**Sources:** Maryland Vital Statistics, 1999  
Maryland Department of Planning, 1995, 1998, 1999

## Reducing Tobacco Use Among Youth

### Definition

Tobacco use refers to the use of cigarettes, cigars, and smokeless tobacco products.

### Problem

Tobacco use is the the leading preventable cause of death in the United States. It is attributed to more than 400,000 deaths and is linked to heart disease, chronic lung disease and cancer. According to "Making Maryland the Tobacco Free State," a report by the Task Force to End Smoking in Maryland, more Marylanders die prematurely from tobacco use or exposure to secondhand smoke, than from any other single cause, including alcohol, motor vehicle accidents, AIDS, murders, suicides, illegal drug use, and fires combined. Despite this risk, many people start smoking each year. In 1996, over 1.8 million people nationwide became daily smokers. It was estimated that two thirds were under the age of 18. Teen-age tobacco use is a major public health problem. Prevention and control activities are imperative in changing negative health indicators that relate to tobacco use. Efforts must be initiated at the community level and supported at the state and federal levels.

#### Percent of Somerset County Students Reporting Cigarette Use by Grade Level and Time Period

	Cigarette use in last 12 months			
	1992	1994	1996	1998
12th Grade	40.0	29.4	37.0	42.7
10th Grade	28.6	29.4	36.9	40.2
8th Grade	19.5	30.5	29.0	21.6
6th Grade	7.5	1.4	16.6	18.4

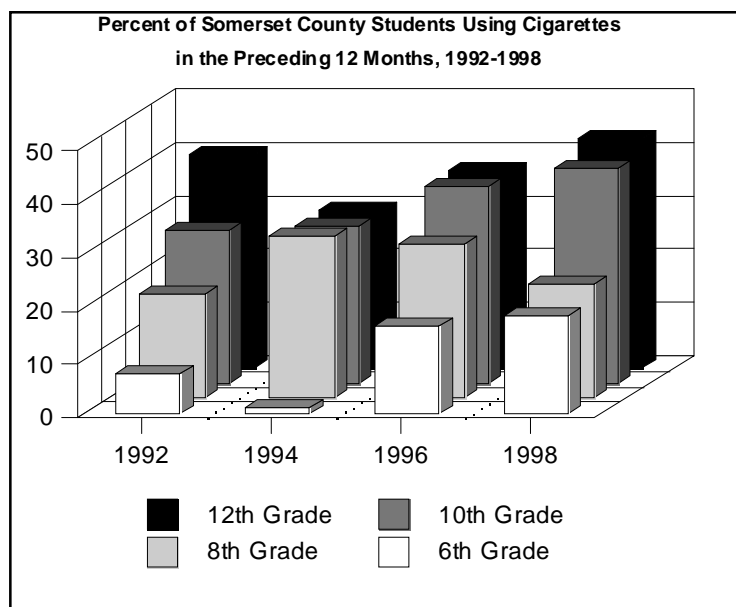
Source: Maryland Adolescent Survey, 1992, 1994, 1996, 1998

### Determinants

No single factor determines patterns of tobacco use. The patterns result from a complex interaction of multiple factors, such as: lack of education, low socio-economic status, low self-esteem, peer pressure, targeted marketing, availability of tobacco products, and cultural characteristics. Many of these factors place Somerset County at a higher risk of tobacco use. Statistically, 46% of the population have less than a high school education and 21.4% live below the poverty level. Tobacco may also be more accessible to Somerset County youth. A 1999 Food and Drug Administration vendor check discovered that 33% of establishments sold tobacco to consumers less than 18 years of age.

## Disparities/Data

The National Youth Tobacco Survey, done in 1999, found that 12.8% of middle school students and 34.8% of high school students were using some form of tobacco. This equates to one of every 10 middle school students and more than one quarter of high school students. Somerset County is above the national average for tobacco use in the middle and high school population. According to the 1998 Maryland Adolescent Survey, 18.4 % of sixth graders, 21.6% of eighth graders, 40.2% of 10th graders and 42.7% of 12th graders had smoked cigarettes in the last 12 months. Most adolescents start, not fully realizing that the nicotine in tobacco is as addictive as heroin, alcohol, or cocaine and most underestimate the health consequences. Smoking increases coughs, shortness of breath and respiratory illnesses, decreases physical fitness, and adversely affects blood cholesterol levels. Secondhand smoke can cause respiratory illness, increase the risk of lung cancer and heart disease and trigger asthma attacks.



Source: Maryland Adolescent Survey, 1992, 1994, 1996, 1998

**Objective 1 -** By 2010, school-age tobacco use will be decreased by 50%. (Baseline 1998: 18.4% of sixth graders; 21.6% eighth graders; 40.2% 10th graders; and 42.7% of 12th graders had smoked cigarettes in the last 12 months.)

**Objective 2 -** By 2010, Somerset County vendor compliance checks will result in a violation rate of no more than 5%. (Baseline: 33% in 1999)

## Action Steps

- ⇒ Work with school administrators/personnel to develop policies on tobacco use.
- ⇒ Work with school officials to help create developmentally appropriate instruction in grades kindergarten through 12 that addresses the social and psychological causes of tobacco use.
- ⇒ Collaborate with school administrators to promote cessation programs.
- ⇒ Build community coalitions to address adolescent tobacco use.
- ⇒ Support community groups in their efforts to prevent smoking among adolescents.

- ⇒ Encourage adults who interact with adolescents (parents, teachers, etc.) to serve as role models.
- ⇒ Develop counter marketing strategies to the advertisement of tobacco products.
- ⇒ Provide outreach to adolescents to reduce initiation of tobacco use.
- ⇒ Provide training to health department staff who provide home visits in an effort to educate families on the effects of tobacco use.
- ⇒ Assist in and support law enforcement efforts to monitor community compliance with youth tobacco access laws.
- ⇒ Encourage elimination of counter displays of tobacco products by local merchants.

## Partners

American Cancer Society • American Heart Association • American Lung Association • Local Management Board • Maryland Department of Juvenile Justice • School Health Council • Somerset County Board of Education • Somerset County Health Department

## Related Reports

- American Heart Association. (1998). Children and the need for physical activity: fact sheet. *American Heart Association Website*. Available: [http://www.americanheart.org/Health/Lifestyle/Physical\\_Activity/ChildFac.html](http://www.americanheart.org/Health/Lifestyle/Physical_Activity/ChildFac.html)
- Maryland State Department of Education. (1992, 1994, 1996, 1998). *Maryland adolescent survey*.
- Maryland Department of Health and Mental Hygiene, Division of Cancer Control. (1996). *Maryland cancer control plan*.
- Maryland Department of Health and Mental Hygiene, Division of Health Statistics. (1993-1998). *Maryland vital statistics annual reports*.
- Maryland Department of Health and Mental Hygiene, Task Force to End Smoking in Maryland. (1999, December). *Making Maryland the tobacco-free state*.
- Smoke Free Maryland. (1999). "FDA compliance checks." *Smoke Free Maryland: A Coalition for Tobacco Control Website*. Available: <http://www.smokefreemd.org>.
- U.S. Department of Health and Human Services. (1998). *Healthy People 2010 objectives*. Report . Washington, DC: U.S. Department of Health and Human Services, U.S. Government Printing Office.

### Cross-Reference Table for Somerset County

See Also

Child and Adolescent Health .....	33
Tobacco Use .....	136

# TALBOT COUNTY



## Selection of Focus Area

Talbot County's health priorities include many issues relevant to its youngest residents. Improved perinatal care, enhanced primary care and immunization compliance, as well as dental, mental health and addictions issues are ongoing areas of concern. The issue of violence in the lives of our children was chosen as our health priority because local data showed a worsening trend in juvenile crime violence. Increased episodes of violent behavior among children and youth nationally have emphasized the tremendous impact violence can have on the lives of the youngest residents of our communities.

### DEMOGRAPHIC OVERVIEW

#### Estimated Population, by Race – 1998

Total .....	33,070
White .....	75.7%
Other .....	24.3%

#### Estimated Population, by Age – 1998

Under 1 .....	330	18-44 .....	11,100
1-4 .....	1,480	45-64 .....	8,090
5-17 .....	5,230	65+ .....	6,840

All causes Mortality Rate (age-adjusted, per 100,000 population) 1996-1998 ..... 409.4

Infant Mortality Rate 1995-1999 ..... 3.5

Estimated Mean Household Income – 1999 ..... \$68,100

Estimated Median Household Income – 1999 ..... \$44,800

Civilian Unemployment Rate, Annual Average – 1999 ..... 2.8

#### Labor force (Top 4) – 1995

Services .....	8,000	Manufacturing .....	3,000
Retail Trade .....	4,300	Construction .....	1,700

**Sources:** Maryland Vital Statistics, 1999  
Maryland Department of Planning, 1995, 1998, 1999

## **Reducing Interpersonal Violence in the Lives of Children**

### **Definition**

Interpersonal violence refers to injury or harm that occurs in physical altercations between at least two human beings.

### **Problem**

Interpersonal violence is a substantial problem for the children and youth (ages birth to 19) of Talbot County who comprise 22.8% of the population. Although rates of indicated child abuse and neglect are near the State average, Talbot exceeds the rate of 13 other jurisdictions in Maryland. Talbot's non-violent and violent juvenile crime arrests, as well as its violence related school suspension rate, are the fourth worst in the state.

### **Determinants**

Healthy People 2010 cites poverty, lack of educational and employment opportunities, and discrimination as significant risk factors for violence. It also emphasizes that strategies for reducing violence should begin early in life, before violent beliefs and behavioral patterns are established.

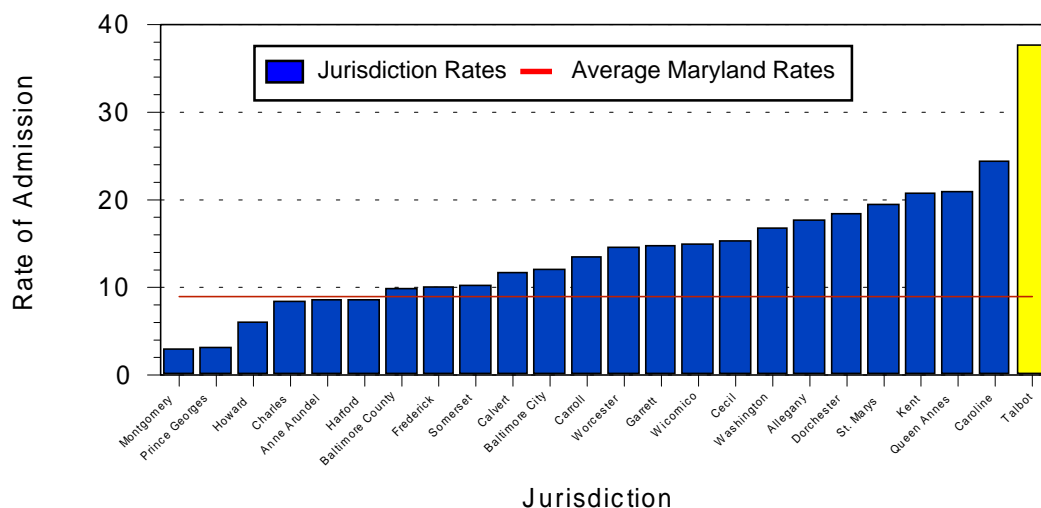
Talbot's on-time graduation rate is the fifth worst in the State. One of every four Talbot mothers age 26 or younger who gave birth in 1998 did not have a high school diploma. Seventy-eight percent of parents in a household are employed, meaning many middle and high school children have minimal supervision from the time school dismisses until adults arrive home. Only 164 infant day care slots exist in the County although there are approximately 350 births per year.

The number of children living in poverty has increased since 1990. In 1995, one of every 7.4 children were living at the federal poverty level. In 1989, the median family income (\$38,599) was less than the State level (\$45,034) and the average income of a female headed household was only \$17,722 (Maryland's was \$21,292). There are no post-secondary educational facilities in the County. In 2000, the public transportation system only served certain geographical areas of the County and had no evening services for people without transportation to evening classes. A high school vocational technical center was being constructed; but no vocational technical programs were available to high school students or adults in the County.

In the 1996 Survey of Drug Use Among Maryland Adolescents, Talbot County statistics indicate that 59% of 12<sup>th</sup> graders were current beer and wine users and 55% used liquor. Thirty-seven percent of seniors were using cigarettes. All these figures are above the state average rates. Talbot is across the board higher on all substances used by eighth and 10<sup>th</sup> graders when compared to the State. Talbot has the highest admission rate in the State for adolescent substance abuse treatment.

## Rate of Adolescent Admission to Substance Abuse Treatment Program

FY 1998



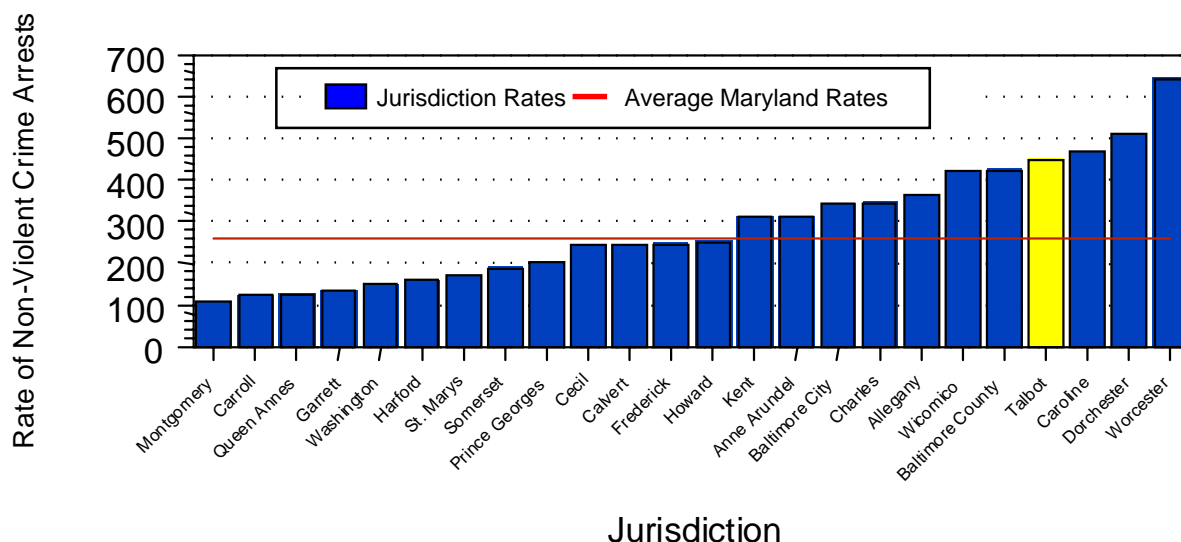
Source: Maryland Alcohol and Drug Abuse Administration Fiscal Year 1998  
Rate is number of admissions per 1,000 population 10-19 years of age.

Focus groups conducted in the late summer of 1999 with 80 Talbot children ages five to 13 indicated that violence was an issue of concern for them. They indicated that bullies were a problem both in schools and the community. They reported that BB handguns, knives and razors were regularly brought to school and that some school bus drivers did not maintain control on the buses. Students felt that their sense of insecurity had increased due to bomb scares in local schools. They reported that they felt teachers could be more helpful in assisting them to deal with conflict.

In the community, children cited the easy availability of weapons and drugs as an issue. They said animal abuse and violence in their homes were of concern. Children indicated that although they are taught ways to handle conflict without physical aggression in school, that this is not what they see practiced in their homes and community. Children said their parents have a clear expectation that children will fight back if someone hits them first. Some children said they will be punished if they don't hit back. Children report that racial discrimination is an issue and that bi-racial and Hispanic children are frequent targets of teasing. The children clearly expect that some of their friends will die before age 18 from drinking and driving, fights, drugs, and AIDS.

Children spoke of wanting more adult involvement in their lives. They wished that their parents would attend activities with them rather than sending them alone or with peers. They also spoke of the need for adults to be more attentive and alert to what is happening to children in the com-

## Juvenile Non-Violent Crime Arrests



Source: *Maryland Kids Count Data Book*, The Annie E. Casey Foundation, 1999.

munity.

**Objective 1** - By 2010, reduce the rate of indicated child abuse and neglect investigations to less than 5.0 per 1,000 (1998 rate: 6.3). (Source: *1999 Maryland Kids Count Fact Book*)

**Objective 2** - By 2010, reduce the violence-related school suspension rate to no more than 70 per 1,000 (1997-1998 rate: 83.6). (Source: *1999 Maryland Kids Count Fact Book*)

**Objective 3** - By 2010, reduce the juvenile violent crime arrest rate to no more than 80 per 10,000 youth ages 10 to 17 (1997 rate: 103.2). (Source: *Maryland Kids Count Fact Book*)

**Objective 4** - By 2010, reduce the juvenile non-violent crime arrest rate to no more than 300 per 10,000 youth ages 10 to 17 (1997 rate: 452.6). (Source: *Maryland Kids Count Fact Book*)

### Action Steps

- ⇒ Increase the high school completion rate by increasing alternatives to traditional high school programs and enhancing availability of Graduate Equivalency Diploma (GED) Programs.



- ⇒ Increase the percentage of children attending after-school and summer programs.
- ⇒ Increase Healthy Family home visiting services for five years to all families of newborns who are identified as high risk families on the Kempe Family Stress Checklist.
- ⇒ Increase the proportion of primary providers who are trained to screen for mental health issues for infants, toddlers, preschool children, school-age children and adolescents.
- ⇒ Increase the proportion of primary care providers who are trained to offer information and make referrals for parent education that focuses on the mental health needs of infants, toddlers, and preschoolers.
- ⇒ Increase the proportion of primary care providers for children who include assessment of cognitive, emotional, and parent-child functioning with appropriate counseling, referral, and follow-up in their clinical practice.
- ⇒ Increase the economic vitality of lower income residents of the community by enhancing job training and advanced educational opportunities.
- ⇒ Increase minority and poorer elementary school children's opportunities for post secondary education by developing a plan that commits financial support while the student is in the second or third grade.
- ⇒ Increase infant and toddler day care slots by developing a plan with the business community that includes corporate supplemented day care.
- ⇒ Enhance preschool children's readiness to learn.
- ⇒ Develop a comprehensive community violence education program that targets schools, businesses, social and health care agencies as well as geographical areas of the community that are considered higher-crime areas.
- ⇒ Reduce utilization of alcohol and other substances through increased prevention and treatment.
- ⇒ Utilize information obtained from studying the various components of childrens'

services to identify specific processes and procedures susceptible to improvement and apply methods of process improvement.

Partners

21<sup>st</sup> Century Learning Center • Character Counts! • Easton HotSpots Community • Easton Police Department • Mid-Shore Council on Family Violence • Pickering Creek Environmental Center • St. Michaels Housing Authority • Shore Health Systems • Talbot County Government • Talbot County Department of Juvenile Justice • Talbot County Department of Social Services • Talbot County Health Department • Talbot County Public Schools • Talbot’s Children’s Trust, Inc. • Talbot County States Attorney’s Office • Talbot County Sheriff’s Department • Talbot Family Network • Talbot Mental Health Association • Talbot Multi Cultural Committee • Talbot Partnership for Alcohol & Other Drug Abuse Prevention • West Side Neighborhood Association

References

Advocates for Children and Youth, Inc. (1999). *1999 Maryland Kids Count Factbook*. Baltimore, MD: Advocates for Children and Youth, Inc.

Maryland Department of Health & Mental Hygiene, Maryland Alcohol and Drug Abuse Administration. (1998). *Maryland Alcohol & Drug Abuse Administration report for fiscal year 1998*.

Maryland Department of Planning. (1991). *1990, 1980 and 1970 population and Housing Characteristics for State, Counties, and Baltimore City*.

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Talbot County Health Department. (1998). *Certificates of live birth*.

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Cross-Reference Table for Talbot County	
See Also	
Child and Adolescent Health .....	33
Injury and Violence Prevention .....	91

# WASHINGTON COUNTY



## Selection of Focus Area

A list of health problems and access problems were initially developed by the Coalition for a Healthier Washington County in 1995 and revised and expanded in 1998-1999. The following health problems were identified: heart disease and stroke, substance use, family violence, cancer, mental health, maternal and child health, pneumonia, influenza, chronic respiratory disease, asthma, diabetes, Alzheimer's disease, dementia, HIV/AIDS, oral/dental health, and arthritis. In addition, the following access to health care problems were identified: transportation, service hours, lack of insurance, inadequate knowledge or motivation, and geographic distribution of services.

### DEMOGRAPHIC OVERVIEW

#### Estimated Population, by Race – 1998

Total .....	127,350
White .....	91.7%
Other .....	8.3%

#### Estimated Population, by Age – 1998

Under 1 .....	1,580	18-44 .....	50,670
1-4 .....	5,860	45-64 .....	28,560
5-17 .....	22,360	65+ .....	18,320

All causes Mortality Rate (age-adjusted, per 100,000 population) 1996-1998 ..... 450.6

Infant Mortality Rate 1995-1999 ..... 6.0

Estimated Mean Household Income – 1999 ..... \$49,000

Estimated Median Household Income – 1999 ..... \$42,400

Civilian Unemployment Rate, Annual Average – 1999 ..... 3.4

#### Labor force (Top 4) – 1995

Services .....	19,900	Government (Federal, Military) .....	9,600
Retail Trade .....	14,100	Manufacturing .....	8,800

**Sources:** Maryland Vital Statistics, 1999  
Maryland Department of Planning, 1995, 1998, 1999

## Reduction of Mortality Associated with Influenza and Pneumonia

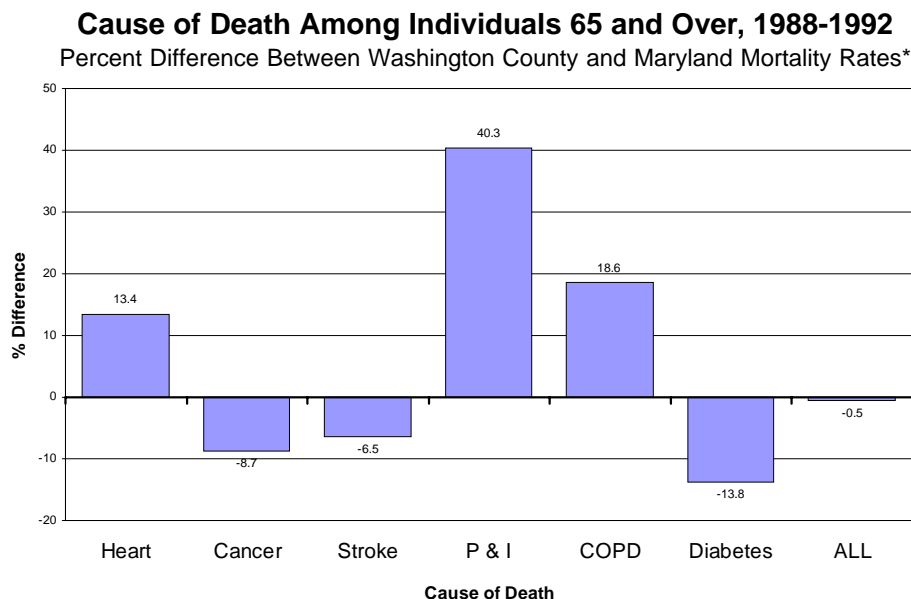
### Problem

An important goal of the National Healthy People 2010 effort is to “prevent disease, disability and death from infectious diseases, including vaccine-preventable diseases.” In 1995 a health needs assessment carried out by the Coalition for a Healthier Washington County identified that the sixth leading causes of death in the County were influenza and pneumonia (Vital Statistics, 1989-1993). When cause of death was examined by age group, it was found that among the population age 65 and over, the influenza and pneumonia mortality rate per 100,000 population for 1988-1992 was 280.3, compared with 199.8 for Maryland (Vital Statistics and CDC, 1988-1992). This 40% higher rate was the largest difference between the County and the State for any specific cause of death in this age group. Data for deaths from pneumonia and influenza from 1993-1997 show that the mortality rate for these diseases has declined and the difference between Washington County and Maryland in the 65 and over age group has decreased but is still about 7% higher, at 217.7 versus 202.7 (Vital Statistics and CDC 1993-1997).

### Determinants

Deaths from pneumonia and influenza predominately occur among the very young and the elderly. The frail elderly in nursing homes are particularly vulnerable. Washington County has a higher nursing home bed per 100,000 population ratio than the state as a whole, 978 compared with 588 respectively, which could partially explain the higher death rates for influenza and

pneumonia in the county (Maryland Health Resource and Planning Commission, 1997). Another determinant, which probably offers the greatest potential for intervention, is the percent of elderly and other high-risk groups in the county vaccinated against influenza and pneumococcal pneumonia. Influenza vaccine is administered on a yearly basis, while pneumococcal vaccine is currently administered once every seven to 10 years. The coverage rates of these vaccines in the population 65 and over in 1993 was 42% for influenza and 25% for pneumonia in Western Maryland compared with 50% and 39% for all of Maryland (BRFSS, 1993). Trends in these rates over time reveal that the difference between Washington County and Maryland was essentially eliminated between 1993 and 1997 for influenza vaccinations. Pneumonia vaccination rates for Western Maryland exceeded Maryland as a whole in 1995 and 1997.



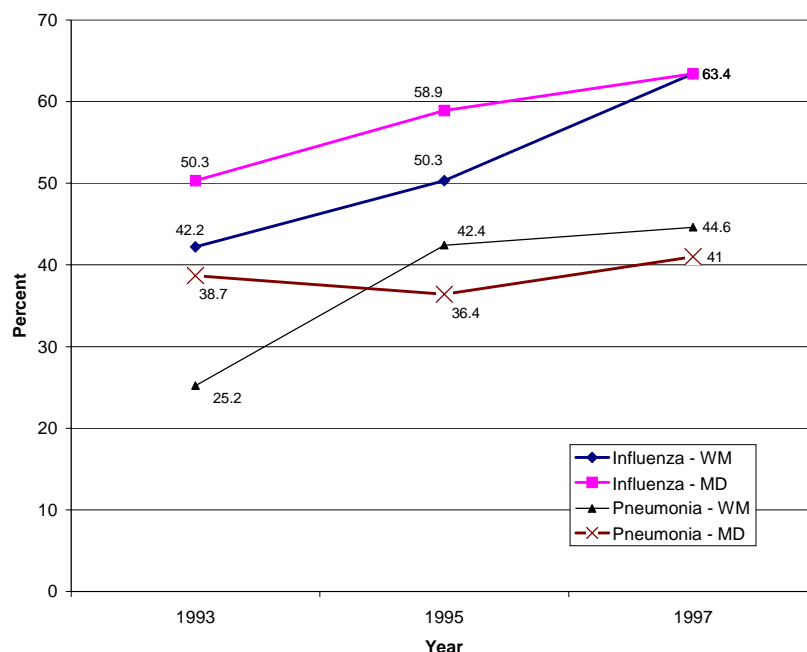
\* Mortality rates are the average of deaths per 100,000 population 65 and over, 1988-1992.

**Note:** P&I = pneumonia and influenza, COPD = chronic obstructive pulmonary disease.

**Source:** DHMH Vital Statistics and CDC Mortality Statistics, 1988-1992.

As mentioned previously, the major population associated risk factor related to deaths from influenza and pneumonia is age. Assessment of death rates by race was only possible in the 65 years and older age group because of the small minority population in the county and the small numbers of deaths in other age groups. In this age group, data from 1979 through 1997 in Washington County (aggregated to have adequate numbers) did not show any significant disparities between races, at 216.7 per 100,000 for whites and 214.3 for African-Americans (Vital Statistics and CDC, 1979-1997).

**Trends in Influenza and Pneumonia Vaccination Rates, 1993-1997**  
Western Maryland Region (WM) and all Maryland (MD) Rates for Individuals 65 and Over



Note: Rates are percent appropriately vaccinated.

Source: Maryland Behavioral Risk Factor Surveillance System, 1993-1997.

Washington County established a goal for the year 2000 to decrease the disparity between the county and the state death rates due to influenza and pneumonia in the age group 65 and older. The goal for 2010 is to lower both the overall adjusted death rate and the death rate among the elderly due to pneumonia and influenza below the comparable rates for Maryland and the U.S.

Based on the initial 1995 health needs assessment, the Coalition for a Healthier Washington County organized an interagency task group to improve the vaccination coverage rate for influenza and pneumonia. Targeting the fall of each year, starting in 1997, there has been increased community education, use of the media and attempts to make vaccinations more available and accessible. Evaluation of this effort is summarized in the figure above (vaccination coverage rates for Western Maryland). The activities of this task group have been sustained and will be important to continue and expand in order to assure achievement of the 2010 goal. Increased efforts to improve coverage with the pneumonia vaccine has been set as a priority for 2000-2001.

**Objective 1** - By 2010, increase the annual influenza vaccination rate of individuals age 65 and over to at least 90% and the rate among other high-risk individuals to at least 60%. (Baseline: age 65 and older at 42%, 1993)

**Objective 2** - By 2010, increase the rate of adequate pneumonia vaccination to at least 90% among individuals 65 and over and to at least 60% among other high-risk groups. (Baseline: age 65 and older at 25%, 1993)

Action Steps

- ⇒ Increase awareness among high-risk populations and the community as a whole of the need for adequate vaccination against pneumonia and influenza.
- ⇒ Provide better access to vaccination programs among the high-risk population and the community as a whole.
- ⇒ Improve influenza and pneumonia surveillance in high-risk populations and the community combined with appropriate follow-up and control efforts.
- ⇒ Expand the appropriate use of available anti-viral agents for influenza among at-risk populations and reduce the inappropriate use of antibiotics in the community in order to slow the development of antibiotic resistance among organisms that cause pneumonia.

Partners

Board of Education • Coalition for a Healthier Washington County • Housing Authority • Washington County Health Department • Washington County Health Systems • Washington County Commission on Aging

References

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Cross-Reference Table for Washington County	
See Also	
Child and Adolescent Health .....	33
Immunization and Infectious Diseases .....	74

# WICOMICO COUNTY

## Selection of Focus Area

For FY2001, following a review by the Wicomico County Health Planning Board, the public health focus areas for Wicomico County indentified were:

- ⇒ Children (emphasis on Improved Pregnancy Outcomes)
- ⇒ Cancer
- ⇒ Cardiovascular Disease
- ⇒ Addictions (emphasis on Underage Drinking)
- ⇒ Tobacco Use
- ⇒ Healthy Lifestyles



In response to the "One Maryland" economic development effort, priorities for economic development are: more sub-specialty physicians; health benefits for the working uninsured/underinsured; work site wellness/screening programs; and expansion of public sewer/water systems.

### DEMOGRAPHIC OVERVIEW

#### Estimated Population, by Race – 1998

Total .....	79,370
White .....	70.0%
Other .....	30.0%

#### Estimated Population, by Age – 1998

Under 1 .....	1,060	18-44 .....	31,590
1-4 .....	4,030	45-64 .....	16,910
5-17 .....	15,530	65+ .....	10,250

All causes Mortality Rate (age-adjusted, per 100,000 population) 1996-1998 ..... 549.1

Infant Mortality Rate 1995-1999 ..... 8.0

Estimated Mean Household Income – 1999 ..... \$47,700

Estimated Median Household Income – 1999 ..... \$36,900

Civilian Unemployment Rate, Annual Average – 1999 ..... 4.6

#### Labor force (Top 4) – 1995

Services .....	14,100	Manufacturing .....	7,300
Retail Trade .....	9,300	Government (Federal, Military) .....	5,900

**Sources:** Maryland Vital Statistics, 1999  
Maryland Department of Planning, 1995, 1998, 1999

## **Focus Area 1 - Improve the Health and Well-Being of Women, Infants, Children and Families**

### **Problem**

The rural nature of Wicomico County limits job opportunities and access to adequate transportation. Low-income jobs often do not provide health insurance or only limited health insurance coverage. This is a major barrier to access preventative health care like preconception education and early prenatal care. Many risk factors associated with poor maternal/infant outcomes can be directly linked to access issues. In 1999, according to the Wicomico County Medicaid Program, over 470 pregnant women were determined eligible for the Maryland Children's Health Program (MCHP). This accounts for a very large proportion (45%) of the total births (1,037) in the county and is one indicator of the level of poverty in the community.

During prenatal counseling, health care providers can refer women for medical and psychosocial or support services for any identified risk factors. Early prenatal visits offer an opportunity to provide information about the adverse effects of substance abuse, including alcohol and tobacco, during pregnancy. Use of timely, high-quality prenatal care can help prevent poor birth outcomes and improve maternal health by early identification of high-risk women. Interventions/referrals to treatment may reduce the occurrence of low birth weight (LBW) infants and reduce infant mortality/morbidity. There is a national, State and local disparity of infant mortality and LBW among the African-American and white infants. There is a need to outreach and educate the African-American population of the importance of accessing early prenatal care. The current perinatal system of care serves the three Lower Shore counties. Collaboration and cooperation among private and public agencies and organizations is key to improving this system.

### **Determinants**

The Healthy People 2010 goal for infant mortality rate is 4.5 per 1,000 live births. Department of Health and Mental Hygiene (DHMH) 1998 Preliminary Vital Statistics reports the Infant Mortality Rate (IMR) at 10.6 per 1,000 for Wicomico County, an increase from the 1997 rate of 3.7 per 1,000. A slight increase in the number of deaths in 1998 dramatically increased the IMR for both the AA and white populations (19.4 and 6.3 per 1,000 respectively). The average IMR by five-year intervals between 1989-1993 (10.3) and 1994-1998 (8.4) shows a decline of 19.3% for Wicomico County. This trend closely follows the State decrease of 11.3% with a five-year rate of 8.6 per 1,000 (1994-1998). The national rate (7.2) is substantially lower.

Despite declines, the African-American rate continues to be three times higher than the white rate. The three leading causes of infant death in 1998 were disorders related to short gestation, sudden infant death syndrome (SIDS), and congenital anomalies. This same trend is reflected in the state statistics. A review of matched birth/death certificates for 1999 found the number of deaths (11) and the leading cause of death unchanged from 1998.

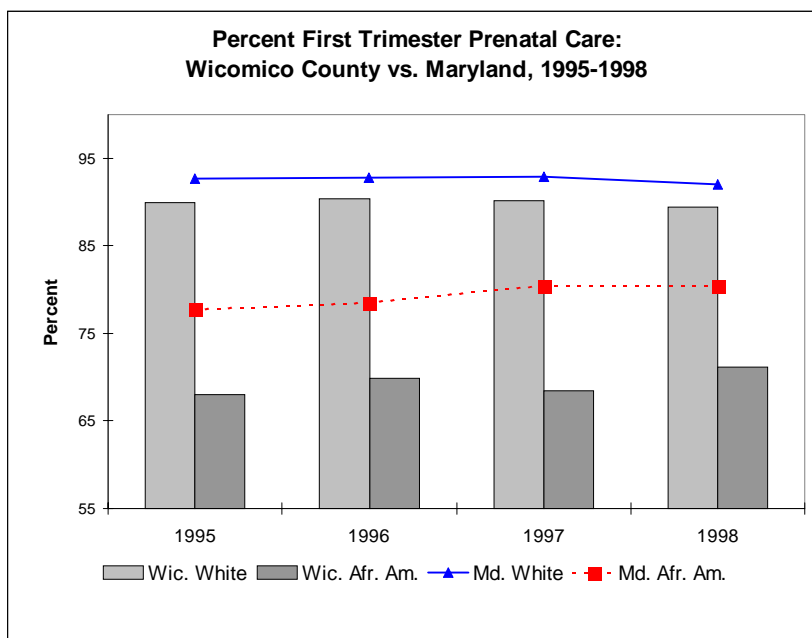
The percent of low birth weight (LBW) infants decreased slightly for both races in 1998. In 1998, the percent of LBW for African-American births was 10.8% as compared to 6.3% for white births.



The percent of LBW for all races (8.0%) is comparable to the State percent (8.7%). The 2010 goal is 5% of total births. The AA LBW percent remains two-three times higher than the white LBW percent over a 14 year period (1985-1998).

Overall entry into first trimester of care is 82% of the total births in 1998 for Wicomico County. The Healthy People 2010 goal for first trimester care is 90% of total births. A lower percent of AA women (71%) entered early care in 1998 as compared to the white women (89%). In four years (1995-1998), AA women enter first trimester care an average of 20% less often as compared to white women.

The total number of births to adolescents (age 15 to 17) has declined since 1994. Although births to both AA and whites have declined, the number of births to white teens has decreased at a higher rate. Also, 1997 DHMH vital statistics show AA females account for only 25% of the females age 15 to 19, yet the number of births to AA teens is at least two times higher than the white teens in this county. Although teen birth rates have declined in this County, the birth rate for adolescents age 15 to 19 was still fifth highest in the state in 1997. Pregnancy rates include live births, induced abortions and fetal losses. Data on induced abortions is not available for this county. It is therefore difficult to compare this county's performance against the 2010 goal to: reduce pregnancies among females aged 15 to 17 to no more than 45 per 1,000 adolescents.



**Source:** Maryland Annual Vital Statistics Reports, 1995-1998.

### Fetal Infant Mortality Review Board (FIMR)

Over 20 issues were identified from 25 case reviews over a two-year period. The top five problems are as follows: tobacco use during pregnancy; lack of domestic violence screening upon entry into prenatal care; no health insurance coverage for the unemployed or low income family; inconsistent or lack of treatment for pregnant women with Group B beta Strep and lack of adequate sexually transmitted disease (STD) screening and treatment.

### Summary of FY1999 Maryland Prenatal Risk Assessments for Wicomico County

Health care providers must complete a prenatal risk assessment for all pregnant medical assistance (MA) recipients. Psychosocial risk factors include higher tobacco, drug, and alcohol use as compared to statewide data. The percent of housing/environmental concerns and lack of social/emotional support is two to three times higher for the County than for the State.

<b>Maternal and Infant Care Indicators for Wicomico County and the Healthy People 2010 Goal</b>		
<b>Indicators</b>	<b>Wicomico County 1998</b>	<b>Healthy People 2010</b>
Infant Mortality Rate	10.6	4.5
Percent of Low Birth Rate	8.0%	5.0%
Percent 1 <sup>st</sup> Trimester of Care	82%	90%

**Source:** Maryland Vital Statistics, 1998 and Healthy People 2010

### **Lower Eastern Shore Study (April 1, 1999 – July 31, 1999)**

Preliminary findings conclude that the women with MA had fewer visits as compared to all others. African-American women and women with MA entered care later than all others. Based on the Adequacy of Prenatal Care Utilization (APNCU) Index developed by Kotelchuck (1994), 39% of women with MA had adequate care as compared to 66% of women with all other insurance. Sixty-eight percent of white women had adequate plus initiation of care as compared to 36% of AA women and 17% of women of other races.

**Objective 1** - Reduce IMR, the percent of LBW babies and promote early entry into care through perinatal system improvements by 2010 for Wicomico County residents as measured by the Healthy People 2010 Goals.

### **Action Steps**

- ⇒ The Lower Shore Perinatal Council (LSPC) will continue to support Baby Net and Perinatal Partner programs through MOU's (memoranda of understanding) with local health care providers.
  - ❖ The Baby Net program will serve 30 pregnant qualified women annually.
  - ❖ The Perinatal Program will serve six practices and refer 100 women for services annually.
- ⇒ The Lower Shore FIMR Policy Board will select one key priority issue as identified from the Lower Shore FIMR Technical Review Report to develop and implement a regional strategy by the end of FY2002.
- ⇒ The Lower Shore FIMR Technical Board will continue to monitor systems of perinatal care in the region by conducting 15 perinatal reviews annually.
- ⇒ The Lower Shore FIMR Technical Board will provide quarterly updates to the policy board members of the results of ongoing case reviews.

- ⇒ Both FIMR Boards will report to the community on the progress of perinatal systems improvements annually.
  - ⇒ Both FIMR Boards will communicate through mutual membership the findings from each county-based Child Fatality Review Team to ensure coordinated prevention efforts.
  - ⇒ The Coalition for Healthy Youth, and the local Interagency Committee on Adolescent Pregnancy Prevention and Parenting (ICAPPP), will educate and inform the community of teen pregnancy issues and coordinate teen pregnancy prevention programs in conjunction with the Wicomico Partnership (the local management board) through the following:
    - ❖ Annual grant application for the AACT (Adults and Children Talking) campaign;
    - ❖ Ongoing development of the Web site, <http://www.aact.net>;
    - ❖ Support for continued funding and grant application for the existing teen pregnancy prevention programs, IMAGES and GEMS; and
    - ❖ Support other community-based organizations (COBs) to apply for teen pregnancy prevention grants.
- 

## Partners

Child Fatality Review Team • Coalition for Healthy Youths • Lower Shore FIMR Technical Board • Lower Shore FIMR Policy Board • Lower Shore Perinatal Council • Wicomico County Health Department

## Focus Area 2 - Reducing Underage Drinking

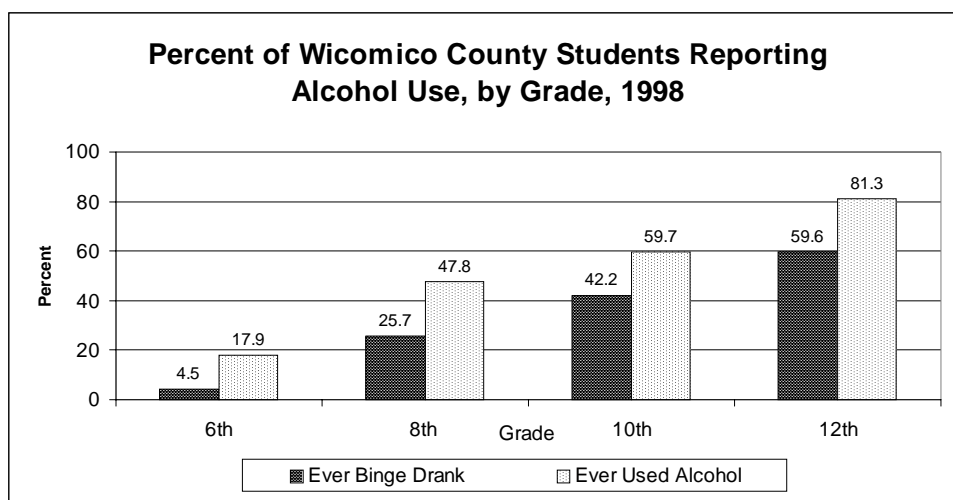
### Problem

Underage drinking is a national problem. At this time, federal monies are dispersed to the states and then to the counties to focus on this issue. Nationally and regionally, students are drinking at an earlier age. Between grade six and grade eight, students' use of beer, wine, or wine coolers in the past 30 days has almost tripled (1998 Maryland Adolescent Survey).

In Wicomico County, family events usually include the use of alcohol. It is believed that this sends a strong message to young people: to have fun, you need to drink. Adults in our community have made comments like: "It's only alcohol," "I would prefer they (speaking of their adolescents) drank at home than somewhere else," "It's better than using other drugs," "I drank when I was their age," etc. There is a need to broaden the number of people involved in the underage drinking prevention effort in Wicomico County. As more people become informed and involved in this effort at the local level, the acceptance of underage drinking should decrease.

### Determinants

According to the 1998 Maryland Adolescent Survey, the numbers of students reporting use of any form of alcohol in Wicomico County are as follows: 17.9% for sixth graders; 47.8% for eighth graders; 59.7% for 10<sup>th</sup> graders; and 81.3% for 12<sup>th</sup> graders. The data for the use of five or



Source: Maryland Adolescent Survey, 1998.

more servings of alcohol on the same occasion are as follows: 4.5% for sixth graders; 25.7% for eighth graders; 42.2% for 10<sup>th</sup> graders; and 59.6% for 12<sup>th</sup> graders. Wicomico County youth are above the state average for consumption of beer, wine, or wine coolers in sixth, eighth, and 12<sup>th</sup> grades; five or more servings of alcohol on the same occasion for eighth, 10<sup>th</sup>, and 12<sup>th</sup> grades; use of any form of alcohol in sixth, eighth, and 12<sup>th</sup> grades (Maryland Adolescent Survey, 1998).

The top problem facing children and their families in Wicomico County is drug/alcohol use (cited by participants of the 1998 Wicomico Partnership Survey). The top risk factor noted for the family was parents' acceptance of problem behaviors in children.

The results of a recent Wicomico County Alcohol, Tobacco, and Other Drugs (ATOD) Social Acceptance Telephone Survey (November/December 1999) suggests developing strategies (educational media campaign, local coalition building, etc.) to address illegal use of alcohol under the age of 21. Adults 18 and older participated in the regional survey. Adults aged 35 and under were more accepting of ATOD use than residents over 35. As age increased, acceptance of ATOD use decreased. When comparing professional versus resident responses for alcohol use statements, resident responses demonstrated significantly lower average acceptance ratings than the professionals' perception of resident acceptance.

Studies indicate that making youth and others aware of the health, social, and legal consequences associated with drug and alcohol abuse has an impact on use. Parents also play a primary role in helping their children understand the dangers of substance abuse and in communicating their expectations that drug and alcohol use will not be tolerated.

Findings suggest that having community partnerships in place for sustained periods of time produces significant results in decreasing alcohol and drug use in males. Literature shows that having "buy-in" from local participants greatly enhances the success of any endeavor. Studies also show that changing norms is extremely effective in reducing substance abuse and related problems.

**Objective 1** - By 2010, reduce the use of any form of alcohol ever used:

17.9% to 7.9% for sixth graders  
47.8% to 37.8 % for eighth graders  
59.7% to 49.7 % for 10<sup>th</sup> graders  
81.3% to 71.3 % for 12<sup>th</sup> graders.

**Objective 2** - By 2010, reduce binge drinking (five or more servings of alcohol on the same occasion):

4.5% to 2.5% for sixth graders  
25.7% to 15.7% for eighth graders  
42.2% to 32.2% for 10<sup>th</sup> graders  
59.6% to 49.6% for 12<sup>th</sup> graders.

**Objective 3** - By 2002, the post Alcohol, Tobacco, and Other Drugs Social Acceptance Telephone Survey for adults, 18 and over, will demonstrate a 10% decrease in average acceptance levels on the alcohol statements.

### Action Steps

[ ] denotes who is responsible for tasks

- ⇒ Sustain efforts of Wicomico Underage Drinking Coalition by providing staff, organization, input, facility for meetings, training, etc. [Wicomico County Health Department Drug Prevention Office]

- ⇒ Provide training to the community (Coalition Building, Needs Assessment, Program Development, Evaluation, Proposal Writing/Research, etc.). [Consultant, Wicomico County Underage Drinking Coalition, Wicomico County Health Department Drug Prevention Office]
- ⇒ Provide grant money to community groups to begin their own organizations/coalitions on underage drinking. [Wicomico County Health Department Drug Prevention Office]
- ⇒ Educate the community about underage drinking (Sexually Transmitted Diseases, AIDS, pregnancy, Violence, Binge Drinking, Date Rape Drugs, Underage Drinking Laws, etc.) by enhancing the Speaker's Bureau, developing a Web Page, developing bulleted information sheets on underage drinking, writing articles for the newspapers, etc. [Wicomico County Underage Drinking Coalition, Wicomico County Health Department Drug Prevention Office, Web Page Consultant, Speakers Bureau volunteers]
- ⇒ Develop and implement comprehensive media campaigns to target the following groups of people: adults, adults 35 and under, males (white and African-American-higher acceptance among men in Wicomico County), children and youth. [Wicomico County Underage Drinking Coalition, Wicomico County Health Department Drug Prevention Office; coordinated with local newspapers, radio and television stations]
- ⇒ Implement the Alcohol, Tobacco, and Other Drugs Social Acceptance Telephone Survey during 2002. [Wicomico County Underage Drinking Coalition, in collaboration with Salisbury State University, Wicomico County Health Department Drug Prevention Office]
- ⇒ Increase alcohol and tobacco compliance checks by local enforcement agencies. [Local Enforcement Agencies, ACTION (local tobacco coalition), Wicomico County Underage Drinking Coalition]
- ⇒ Increase enforcement efforts in giving alcohol citations. [Local Enforcement Agencies, Wicomico County Underage Drinking Coalition]
- ⇒ Educate judges on dangers and risks involved with underage drinking. [Wicomico County Underage Drinking Coalition]
- ⇒ Decrease the number of family-oriented events that serve alcohol. [Wicomico County Underage Drinking Coalition, in coordination with local civic groups and organizations]

Partners

*Wicomico Underage Drinking Coalition:* (membership includes the following areas: Prevention, Education, Treatment, Enforcement, and community members)  
Neighborhood Associations • Newspapers: The Daily Times; Salisbury News and Advertiser • Radio Stations (dependant on audience) • Salisbury Area of Property Owners Association (SAPOA) • Salisbury State University • The Salisbury Compact • Television Stations: WBOC, Channel 47, Comcast • Wicomico County Government • Wicomico County Health Department • Wicomico County School System • Wicomico County Ministerial Association • Children, Youth, Young Adults, and Adults in the Community

Related Reports

Maryland State Department of Education. (1998). *Maryland adolescent survey.*  
Wicomico Partnership for Families and Children. (1998). *Wicomico partnership survey.* More information available: <http://www.co.wicomico.md.us/partnership>.  
Wicomico County. (1999). *Wicomico alcohol, tobacco, and other drugs social acceptance survey.*

Cross-Reference Table for Wicomico County	
See Also	
Child and Adolescent Health .....	33
Substance AbuseTreatment .....	132

# WORCESTER COUNTY

## Selection of Focus Area

In 2000, Worcester County Health Department was completing a second comprehensive needs assessment that involved surveys, the APEX process, and a range of agencies, community organizations, and residents. In 1996, this process yielded 10 priority areas, which were revised in 1999-2000 to the following priorities:

Adolescent Sexuality, Aging in Worcester, Alcohol and Other Drugs, Cancer and Tobacco, Child Safety and Immunization, Diabetes, Injury, Mental Health, Physical Activity and other cardiovascular disease risk behaviors, and Perinatal Care.



The Health Department's *number one priority* is to maintain a viable infrastructure of appropriate, well-trained staff; communications systems; fixed assets; suitable physical plant; and other resources. With these in place Worcester Health can focus on three other priorities: tobacco, aging, and mental health. Worcester Health has many partners (government agencies, volunteers, businesses and community-based organizations). In addition, Worcester and its partners work together on regional issues along with others outside the county, e.g., the regional issues in Mental Health, and the award winning Perinatal Council.

### DEMOGRAPHIC OVERVIEW

#### Estimated Population, by Race – 1998

Total .....	42,780
White .....	71.7%
Other .....	28.3%

#### Estimated Population, by Age – 1998

Under 1 .....	480	18-44 .....	14,960
1-4 .....	1,980	45-64 .....	10,060
5-17 .....	7,010	65+ .....	8,290

All causes Mortality Rate (age-adjusted, per 100,000 population) 1996-1998 ..... 540.7

Infant Mortality Rate 1995-1999 ..... 9.1

Estimated Mean Household Income – 1999 ..... \$42,300

Estimated Median Household Income – 1999 ..... \$32,200

Civilian Unemployment Rate, Annual Average – 1999 ..... 8.8

#### Labor force (Top 4) – 1995

Retail Trade .....	8,600	Government (Federal, Military) .....	2,800
Services .....	8,400	Finance, Insurance, Real Estate .....	2,500

**Sources:** Maryland Vital Statistics, 1999  
Maryland Department of Planning, 1995, 1998, 1999



## Mental Health

### Problem

In Worcester County many children and young adults aged 21 and under, experience the onset of life-long mental disorders. Twenty-eight percent of all mental health services in the public mental health system go to children and adolescents. Sixty-nine percent of outpatient clinical services are used by children and adolescents. Worcester has a high prevalence of mental health consumers who are Medicare eligible. For other children and young adults, normal development is often disrupted by biological, environmental, and psychosocial factors, which impair their mental health, interfere with education and social interactions, and keep them from realizing their full potential as adults. Mental health services, by necessity, involve families.

Number of Services by Age Category				
Setting	Children	Adolescents	Adults	Geriatrics
Inpatient	73	18	153	382
Crisis Services	0	0	13	0
Outpatient	3,326	2,472	2,481	158
Rehabilitation Services	202	118	13,564	4,631
Regional Treatment Centers	220	2,095	0	0

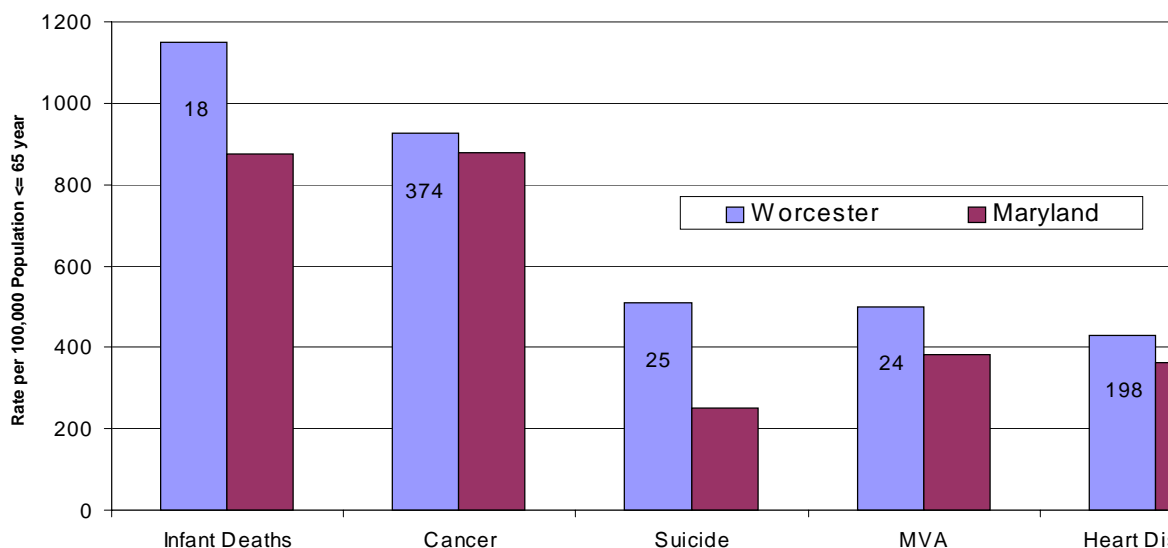
Number of Services by Insurance Status			
Setting	Gray Zone	Medicaid Non-Waiver	Medicaid Waiver
Inpatient	10	190	234
Crisis Services	13	0	0
Outpatient	426	259	7,753
Rehabilitation Services	5,544	844	12,127
Regional Treatment Centers	0	2,095	412

**Source:** Maryland Health Partners (December 1999) Note: WCCSA data modifications

### Determinants

Based on national prevalence of mental illness, at any one time 12% of children and adolescents are expected to be in need of treatment. It is estimated that 90% of these children are receiving care, leaving 10% in need of services. Worcester County also has a rate higher than the State rate of ongoing care management of developmentally-challenged individuals, who are at a higher risk of depression and dementias. There were 25 cases of suicide among Worcester County residents under 65 in a three-year period. This is further indication of mental illness in younger age groups.

### Top Five Causes of Premature (<=65 Years Old) Death Rates, Worcester County vs. Maryland, 1995-1997



Note: At the top of bar is the number of total deaths in Worcester County during 1995-1997.

**Interpretation:** From above chart it is clear that the younger the person dies the greater is the rate of productive life lost Age <=65 years every 100,000 population. Infant death has the highest years of potential life lost rate among all other causes of premature death.

**Source:** CDC Wonder, 1995-1999

The Worcester County Health Department utilizes several methods of needs assessment including consumer and provider surveys and monitoring, peer professional association and inter-agency collaboration and program integration activities. Additionally, each year the Worcester County Core Service Agency hosts an all-stakeholder mental health strategic planning retreat (using focus group tools).

The Worcester County Core Service Agency plans to monitor program activities, process and outcome indicators consistent with the State's "Managing For Results" initiative. The Core Service Agency and the Health Department are always searching for new community partners who share our mission and goals. In this rural area, where resources are relatively scarce, collaborations and partnerships help reduce duplication and help use scarce resources more efficiently.

**Objective 1-** By 2010, reduce the three year average suicide rate to equal the Maryland rate. "Reduce the rate of suicide attempts by adolescents" is a Healthy People 2010 objective. However, there are a lack of local data with which to measure this indicator. Worcester will use Objective 18-1 "Reduce the suicide rate" as the indicator realizing that this rate includes suicides by persons of all ages. The current rate of suicide for Worcester residents is a three year average for CY1996-1998, at 19.6 per 100,000. The current state rate is 9.1/100,000 (both based on the adjustment to 1940).

**Objective 2** - Increase the proportion of children with mental health problems who receive treatment. (Baseline: developmental)

**Objective 3** - Increase the proportion of juvenile justice facilities that screen new admissions for mental health problems. (Baseline: developmental)

**Objective 4** - Increase the proportion of children and young adults with co-occurring substance abuse and mental disorders who receive treatment for both disorders. (Baseline: developmental)

### **Action Steps**

In response to the Healthy People 2010 objectives identified above, six programmatic innovations have been designed for this rural, psychiatrically underserved jurisdiction. Described below are key action strategies:

#### **Worcester County Crisis Response System (CRT)**

The CRT program is a pilot for Ocean City, Maryland to assist the justice and law enforcement system in handling of crisis management. Action Strategies include:

- ⇒ Provide 24-hour, seven day a week, mental health mobile crisis intervention services, including suicide prevention services, to individuals in Worcester County.
- ⇒ Supplement the Maryland Community Criminal Justice Treatment Program (MCCJTP) through on call 24-hour, seven day a week, emergency coverage to the Worcester County Detention Center.
- ⇒ Assist law enforcement officials and the Courts to expeditiously link individuals with mental health needs to community-based mental health programs/services.
- ⇒ Provide consultation to other mental health and human service agencies.
- ⇒ Collect statistical and anecdotal data to develop prevention strategies and design effective programs/services.
- ⇒ Provide mental health cross training to law enforcement and other first responders and develop Critical Incident Stress Management teams to serve Worcester County.
- ⇒ Assume a leadership role and collaborate with all stakeholders to develop the Worcester County Mental Health Disaster Plan.
- ⇒ Assist the Atlantic General Hospital to develop a Department of Health and Mental Hygiene Mental Hygiene Administration (MHA) approved emergency petition facility site.

### **Transitional Age Youth Initiative (TAY)**

The TAY program is a collaborative effort working between a variety of public and private agencies, as well as other local stakeholders and businesses, to develop a culturally competent continuum of community-based services for high-risk youth between the ages of 16 and 24. A multi-disciplinary approach to treatment planning and service delivery will be used to coordinate quality care for youth with mental health and substance abuse treatment issues. Action strategies include:

- ⇒ Comprehensive bio-psychosocial assessment using state of the art tools for comparison and development of individualized treatment plans.
- ⇒ Anticipate barriers to successful rehabilitation.
- ⇒ Focus on increasing the successes the youth experience in each of the critical life domains: Community Supports, Education, Employment, Housing, Health Care, and Legal Involvement.
- ⇒ Determine the most appropriate service and level of care each youth requires to remain in the community.
- ⇒ Provide referral and linkage for the youth to seek alternative resources according to service recommendations.
- ⇒ Create an individualized treatment plan to assist youth in identifying goals and methods of achieving them.
- ⇒ Link youth to appropriate community outpatient mental health and/or substance abuse treatment programs for: Diagnostic Interview Procedures, Individual and Group Therapy, Family Therapy, Pharmacological Management, Psychological Testing, Occupational Therapy using Interdisciplinary Team Treatment Planning and Crisis/Respite Care.

### **School-Based Mental Health Wellness Program**

The School-Based Wellness Program provides mental health care on site in all Worcester County Public Schools, serving children between the ages of five and 17 and their families who are identified and referred by the schools. The program staff:

- ⇒ Provide assessment & evaluation services, individual, group and group therapy, medication, care co-ordination, crisis intervention, anger management, consultation and training.
- ⇒ Act as part of the Board of Education's Life Lines program providing emergency assessments and crisis intervention.
- ⇒ Participate in Pupil Service Team meetings and Individual Education Plan meetings to assist in identifying children in need of mental health services and to serve as consultants to school personnel as they work with children with problems.
- ⇒ Run a summer program that includes a five week, five day a week component for younger children and a shorter intensive five to seven day program for adolescents.

### **Worcester County Forensic Assessment Program**

Frequently individuals who are mentally ill or at high risk to become mentally ill interact with the legal, protective and justice systems before they are referred to the mental health system. The Worcester County Forensic Assessment Program will:

- ⇒ Provide evaluations by a team of mental health professionals for youth referred by the Department of Juvenile Justice (DJJ) after screening, interviewing parents and children at risk for out of home placements, and individuals and families involved in the court system.
- ⇒ Provide a complete bio-psychosocial evaluation including psychological tests when needed.
- ⇒ Make recommendations and referrals for treatment and other services to the individuals, the DJJ, other involved agencies and the Courts.
- ⇒ Make necessary court appearances to review recommendations and review necessary information.

### **Carter Center DJJ Assessment Program**

The Carter Center is a joint DJJ-MHA-Worcester County pilot program to assess and treat Worcester County Youth who are in the regional DJJ detention facility. The program:

- ⇒ Provides assessment of adolescents entering the facility;
- ⇒ Offers follow up treatment and case management; and
- ⇒ Proposes to put in place follow-up services for youth returning to the local community upon release.

### **Early Childhood Intervention Program**

The Worcester County Core Service Agency (WCCSA) has begun to develop an early screening program to identify children at-risk of developing mental health and behavioral issues. This screening program would evaluate children in pre-k, kindergarten and first grade. By the close of the first year of the program (FY 2000), it is anticipated the following Action Strategies will have been accomplished:

- ⇒ Identify screening tools;
- ⇒ Design training procedures;
- ⇒ Review Board of Education and Headstart policies;
- ⇒ Develop relationships with both educational entities;
- ⇒ Identify program evaluation tools;
- ⇒ Confirm linkages; and
- ⇒ Train teachers in all five County elementary schools and one Headstart program in FY2001, the first year of program implementation, early in the academic year.

Partners

Partners are critical to many programmatic objectives. Our key child and adolescent mental health partners include:

Atlantic General Hospital • Department of Juvenile Justice • Headstart • local and state police • Mental Hygiene Administration, DHMH • Maryland Health Partners • Sand Castles, the Health Department’s federally funded Runaway and Homeless Youth program in Ocean City • Worcester County Courts • Worcester County Health Department • Worcester County Mental Health Advisory Council • Worcester County School System

Related Reports

In addition to those mentioned in the overview for the Worcester County Health Department section of this Health Improvement Plan, references include the WCCSA *FY 2001 Worcester County Mental Health Plan*. This document has details of the needs assessment made by the WCCSA. It also contains a comprehensive list of priorities for adult, geriatric and forensic populations and additional objectives for the child and adolescent population.

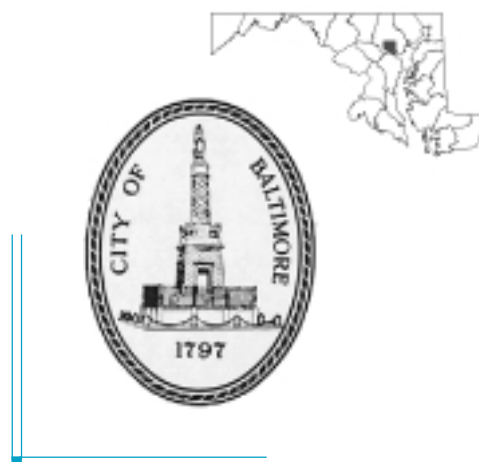
Worcester County is providing an overview of the Mental Health Improvement Plan. For more details refer to the *Worcester County Fiscal Year 2001 Mental Health Plan* published by the Worcester County Core Service Agency. Also refer to the *Local Health Plan for Fiscal Year 2001*, the *Healthy Worcester Report Card*, the *Worcester Cancer Control Plan*, and other categorical reports.

Cross-Reference Table for Worcester County	
See Also	
Mental Health .....	101

# CITY OF BALTIMORE

## Selection of Focus Area

In December, 1998, a five-year plan was developed by the Baltimore City Health Department. This effort produced a strategic plan which provided a conceptual framework for implementing collaborative strategies for improving the health and shaping the future direction of the public health system in Baltimore. Six major priorities were identified: 1) access to health care for all; 2) reduction of substance abuse and related issues; 3) reduction/elimination of adolescent and child morbidity and mortality; 4) prevention of adolescent and child morbidity and mortality; 5) community participation in environmental health issues; 6) cancer awareness and early detection. Because access to health care is an overarching issue, success in this one priority will help ensure success in all other priorities.



### DEMOGRAPHIC OVERVIEW

#### Estimated Population, by Race – 1998

Total .....	645,690
White .....	31.8%
Other .....	68.3%

#### Estimated Population, by Age – 1998

Under 1 .....	9,350	18-44 .....	265,930
1-4 .....	37,500	45-64 .....	128,310
5-17 .....	119,980	65+ .....	84,520

All causes Mortality Rate (age-adjusted, per 100,000 population) 1996-1998 ..... 844.3

Infant Mortality Rate 1995-1999 ..... 12.7

Estimated Mean Household Income – 1999 ..... \$46,600

Estimated Median Household Income – 1999 ..... \$34,500

Civilian Unemployment Rate, Annual Average – 1999 ..... 7.1

#### Labor force (Top 4) – 1995

Services .....	184,300	State & Local Government .....	69,800
Government (Federal, Military) .....	87,600	Retail Trade .....	52,100

**Sources:** Maryland Vital Statistics, 1999  
Maryland Department of Planning, 1995, 1998, 1999



## **Access to Health Care**

### **Definition**

The Institute of Medicine defines access to health care as “the timely use of personal health services to achieve the best possible health outcomes.”

### **Problem**

The timely use of personal health services is often compromised when one is unable or unwilling to pay for care. The uninsured or underinsured population of Baltimore face this challenge. Access to care is also impeded when one is unaware of available health services or when these services do not exist. Finally, social and cultural factors may constitute serious barriers to health care access.

### **Determinants**

#### **Health Insurance**

Lack of health insurance coverage is a major barrier to receiving timely and appropriate health care. According to the Current Population Survey (March 1999), approximately 44.3 million (16.3%) Americans are uninsured. In Maryland, approximately 16.6% of the population are uninsured. Finally, an estimated one in four Baltimore residents does not have health insurance.

In certain segments of the Baltimore City population, the rate of uninsurance is even higher. For example, a recent survey suggests that among Baltimore City male residents between 19 and 64 years of age, the rate of uninsurance exceeds 50%.

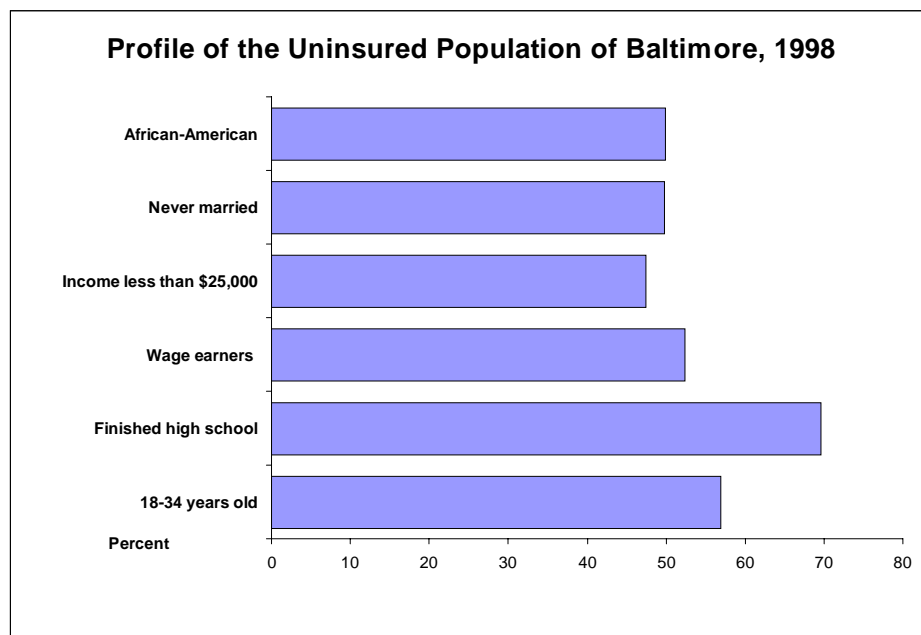
There are also significant racial/ethnic and age disparities in health insurance coverage. According to a three year aggregate analysis (1996-1998) of Baltimore residents from the Maryland Behavioral Risk Factor Surveillance Survey (MBRFSS), African-Americans are more than twice as likely to be uninsured compared to white persons. Baltimore residents between the ages of 18 and 24 are the most vulnerable group with a rate of 43.4% followed by the age group 25-34 at 39.2% and the 35-44 age group at 33.9%, while their counterparts in the 45-64 age group have a rate of 10.3%.

In addition, Baltimore has a significant population of children without health insurance. A large number of these children are eligible for the Maryland Children's Health Program (MCHP) but remain uninsured for many reasons including lack of awareness that the program exists. As a result, they may elude even such basic services as immunization.

## Ability to Pay for Care

Many wage earners lack insurance by virtue of low earning power that also precludes the purchase of costly health services when needed. According to 1998 MBRFSS data, approximately 52% of uninsured Baltimoreans are employed. However, 47% live in households with incomes less than \$25,000 per year. Of employees covered by employer based health insurance, 14% are not enrolled, according to a Health System Change Survey from 1997-98. The availability of affordable health insurance remains a significant barrier to care.

The presence of health insurance does not ensure adequate coverage for some necessary services. Due to high deductibles, premiums or copayments, the underinsured may lack access to primary and preventive care.



Source: Behavioral Risk Factor Surveillance System, 1998

## Availability of Services

For many Baltimore residents who do not fit into specific income, age, and/or gender categories, there is no health care safety net. For example, there are limited services for uninsured post-menopausal women, adolescents between 19 and 21, and males under age 65. In addition, the large number of managed care organizations (MCOs) reduces the City's capacity for uncompensated care, thereby making it more difficult for these populations to access health services.

## Social and Cultural Barriers

Many other factors impede timely and appropriate care. These include the lack of provider's cultural competence, language barriers, consumer's difficulty navigating the health care system, lack of transportation, lack of child care, inconvenient hours of operation, inadequate outreach programs, lack of focus on preventive service and the fear of devastating diagnoses.

**Objective 1** - By 2002, develop a system to accurately assess and monitor the health coverage needs of residents of Baltimore.

**Action Steps**

- ⇒ Collect and analyze information concerning access to and utilization of health care.
- ⇒ Identify and prioritize target populations and barriers to universal access and utilization of health care for all Baltimoreans.

**Objective 2** - By 2010, implement a citywide health plan, which provides affordable access to health care for all Baltimoreans.

**Action Steps**

- ⇒ Support incremental changes in health policy and legislation.
- ⇒ Expand MCHP enrollment to all eligible residents.
- ⇒ Increase treatment capacity for uninsured and underinsured residents.
- ⇒ Increase the number of school-based health centers.
- ⇒ Increase public health education/promotion efforts to raise awareness of eligibility requirements for enrollment in Maryland Pharmacy Assistance Program and Maryland PrimaryCare, particularly among those between the ages of 19-64.
- ⇒ Expand support and outreach services.
- ⇒ Increase the dental services capacity.
- ⇒ Create an Office of Research, Grants, and Evaluation.
- ⇒ Use the forum provided by the Urban Health Coalition to advocate for the need for greater and improved access to portals of entry into the health care system across the network of private and public providers.

Partners

Abell Foundation • Advocates for Children and Youth • The Annapolis State Assembly • Annie E. Casey Foundation • Baltimore City Health Department • Community Voices • The Federal Government • Johns Hopkins University • Kellogg Foundation • Maryland Citizens’ Health Initiative • Maryland Department of Health and Mental Hygiene • Maternal and Child Health Consortium • Open Society Foundation • Robert Wood Johnson Foundation • Safe and Sound Foundation • University of Maryland, Baltimore County • Vision for Health

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Cross-Reference Table for the City of Baltimore	
See Also	
Access to Health Care .....	24

## **IV. APPENDICES**

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# LOCAL HEALTH DEPARTMENTS/FOCUS AREA

## CROSS-REFERENCE TABLE

<i>Focus Area .....</i>	<i>Page</i>
<b>Access to Health Care .....</b>	<b>24</b>
Allegany County .....	144
Anne Arundel County .....	152
Baltimore County .....	158
Carroll County .....	172
City of Baltimore .....	296
<b>Cancer .....</b>	<b>30</b>
Cecil County .....	180
<b>Child and Adolescent Health .....</b>	<b>33</b>
Calvert County .....	163
Caroline County .....	167
Dorchester County .....	194
Frederick County .....	202
Garrett County .....	207
Kent County .....	234
Queen Anne's County .....	256
Somerset County .....	265
Talbot County .....	269
Wicomico County .....	279
<b>Chronic Diseases .....</b>	<b>47</b>
Howard County .....	222
<b>Environmental Health .....</b>	<b>51</b>
Howard County .....	222
<b>Family Planning .....</b>	<b>55</b>
Calvert County .....	163
<b>Heart Disease and Stroke .....</b>	<b>60</b>
Cecil County .....	180
<b>HIV .....</b>	<b>65</b>
Caroline County .....	167
Kent County .....	234
<b>Immunization and Infectious Diseases .....</b>	<b>74</b>
Washington County .....	275
<b>Injury and Violence Prevention .....</b>	<b>91</b>
Talbot County .....	269

## Local Health Departments/Focus Area Cross-Reference Table ...continued

<i>Focus Area .....</i>	<i>Page</i>
<b>Maternal and Infant Health .....</b>	<b>96</b>
Charles County .....	188
Montgomery County .....	239
Prince George's County .....	245
<b>Mental Health .....</b>	<b>101</b>
Worcester County .....	288
<b>Oral Health .....</b>	<b>107</b>
Allegany County .....	144
Carroll County .....	172
Frederick County .....	202
Garrett County .....	207
Saint Mary's County .....	261
<b>Public Health Infrastructure .....</b>	<b>115</b>
Harford County .....	211
Prince George's County .....	245
<b>Sexually Transmitted Diseases .....</b>	<b>126</b>
Caroline County .....	167
Kent County .....	234
<b>Substance Abuse .....</b>	<b>132</b>
Carroll County .....	172
Harford County .....	211
Queen Anne's County .....	256
Wicomico County .....	279
<b>Tobacco Use .....</b>	<b>136</b>
Dorchester County .....	194
Somerset County .....	265



## GLOSSARY

**AIDS** - Acquired Immunodeficiency Syndrome

**Ambulatory Detox (AmbDetox)** - Medically managed outpatient treatment aimed at systematically reducing toxins in the client's body.

**Birth Defect** - An abnormality in structure, function, or body metabolism that is present at birth, such as cleft lip or palate, phenylketonuria, sickle disease, or neural tube defect.

**CDC** - Centers for Disease Control and Prevention

**Congenital Syphilis** - A condition in a fetus or newborn caused by infection with the syphilis bacteria from an untreated mother. Infected newborns show a wide spectrum of clinical signs, and only severe cases are clinically apparent at birth. Severe illness or death can result after birth if the newborn is not treated.

**Correctional (CORR)** - The client is incarcerated in a federal, state, or county prison or detention center and participates in an alcohol and drug abuse treatment program within the institution.

**Data** - A representation of facts, concepts, or instructions in a formalized manner suitable for communication, interpretation, or processing by human or automated means. Things known or assumed, facts or figures from which conclusions can be inferred.

**DHMH** - Maryland Department of Health and Mental Hygiene

**Fertility Problems** - Refer to the standard medical definitions of infertility, i.e. have not used contraception and have not become pregnant for 12 months or more; or impaired fecundity, i.e. women reporting no sterilizing operation and classified as finding it difficult or impossible to get pregnant or carry a baby to term.

**Fetal and Infant Mortality Review (FIMR)** - A community-based review process used to enhance the health and well-being of women, infants, and families by improving the community resources and service delivery systems available to them.

**Fetal Death** - Death before the complete expulsion or extraction from its mother of a product of human conception, irrespective of the duration of pregnancy; death is indicated by the fact that after such separation, the fetus does not breathe or show any evidence of life. Fetal deaths are reportable only if death occurs after a period of gestation of twenty or more completed weeks.

**Fetal Mortality Rate** - The number of fetal deaths in a population divided by the total number of the live births and fetal deaths in the same population during the same period.

**Firearm-Related Death** - Any fatal injury resulting from the discharge of a weapon from which a projectile is propelled by explosives.

**Firearm-Related Death, Unintentional** - Deaths that result from accidents or are otherwise not purposeful. They may be the result of self-inflicted injury or injury inflicted by another person.

**Halfway House (HWH)** - A transitional residential care facility providing time-limited services to alcohol and drug abuse clients who have received prior evaluation or treatment for their addiction. These clients are expected to move into a position of personal and economic self-sufficiency.

**HBV** - Hepatitis B Virus

**HIV** - Human Immunodeficiency Virus

**Homicide** - The intentional injury of one person by another resulting in death. It includes deaths by legal intervention (law enforcement officials acting in the line of duty) and deaths by civilians that may be legally justifiable or excusable.

**Hospital Detox (HOSP)** - Detoxification treatment in an inpatient hospital setting.

**HPV** - Human Papilloma Virus

**Indicated Child Abuse and Neglect Rate** - Child Protective Services indicated abuse and neglect investigation rate per 1,000 children under 18 years of age.

**Infant Death** - An infant death is one that occurs before a baby is one year old.

**Infant Mortality Rate** - The rate (per 1,000 live births) of all births, who do not survive beyond the first year of life.

**Information** - The meaning that human beings assign to a set of data by means of conventions applied to those data.

**Intensive Outpatient (IOP)** - A non-residential program that provides highly structured treatment services using a "step down" model of intensity for a minimum of nine hours per week.

**Intermediate Care Facility (ICF)** - A residential facility that provides a short-term intensive regimen of individual and group therapy as well as other activities aimed at the physical, psychological, and social recovery of clients.

**Juvenile Non-Violent Crime Arrest Rate** - Number of arrests of youths ages 10 to 17 for burglary, larceny, theft, and motor vehicle theft per 10,000 youths ages 10 to 17.

**Juvenile Violent Crime Arrest Rate** - Number of arrests of juveniles for a violent offense (i.e. homicide, aggravated assault, forcible rape, and robbery), per 10,000 youths age 10 to 17.

**Kempe Family Stress Checklist** - Tool that utilizes various factors to evaluate level of stress in a family.

**LHD** - Local Health Department

**Low Birth Weight (LBW)** - Weight at birth of less than 2,500 grams (about 5.5 pounds). Very low birth weight is a weight at birth of less than 3.3 pounds (1500 grams).

**Low Birth Weight Rate** - The rate (per 1,000 live births) of all births with birth weights less than 2,500 grams and less than 1,500 grams for very low birthweight.

**Maintenance (MAIN)** - Treatment involving the medically supervised administration of methadone or Levo-Alpha Acetyl Methadol (LAAM) and counseling services to clients addicted to heroin or other opiates.

**Mental Health** - The successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with adversity. From early childhood until late life, mental health is the springboard of thinking and communication skills, learning, emotional growth, resilience, and self-esteem.

**Mental Illness** - The term that refers collectively to all mental disorders. Mental disorders are health conditions that are characterized by alterations in thinking, mood, or behavior (or some combination thereof) associated with distress and/or impaired functioning. (Surgeon General's Report)

**Methadone Detox (MDetox)** - Treatment involving the medically supervised administration of methadone for clients addicted to heroin or other opiates with the objective of systematically reducing toxins in the client's body.

**Neonatal Death** - Death of a live-born infant within the first 28 days of life.

**Neonatal Mortality Rate** - Number of neonatal deaths per 1,000 live births

**Neural Tube Defects (NTD)** - A set of birth defects that result from failure of the neural tube to close in utero. Two of the most common NTDs are anencephaly (absence of the majority of the brain) and spina bifida (incomplete development of the back and spine).

**Non-Hospital Detox (NH Detox)** - Treatment which provides 24-hour supervised medical care in a residential setting. The focus of this treatment is to systematically reduce toxins in the client's body, manage withdrawal symptoms and, once detoxified, refer the client for additional treatment.

**OIDP** - Office of Injury and Disability Prevention

**Other Residential (Other) or (Res)** - Non-chemotherapeutic treatment provided to alcohol and drug abusers in a group living environment for an extended period of time.

**Outpatient (OP)** - A non-residential program that provides diagnosis, treatment and rehabilitation for alcohol and drug abuse clients and their families less than nine hours per week. The clients' physical and emotional status allow functioning with support in their usual environments.

**Perinatal Death** - Death occurring after twenty weeks of gestation but before 28 days after birth.

**Perinatal Mortality Rate** - Number of perinatal deaths per 1,000 total births.

**Pre-Conceptual Health** - The process of preparing a woman of childbearing age to be in a state of optimum health to conceive.

**Prenatal Care** - Pregnancy related health care services provided to a woman between conception and delivery.

**Preterm Birth** - Birth occurring before 37 weeks of pregnancy.

**Public Health Infrastructure** - The systems, competencies, relationships, and resources that enable performance of essential public health services in every community.

**SAMHSA** - Substance Abuse and Mental Health Services Administration

**Sex Work** - Refers to the performance of sex acts in exchange for money, drugs, or other goods.

**STD** - Sexually transmitted disease caused by bacterial, protozoal, or viral organism.

**STD Complications** - Refer to serious health problems that occur following an acute bacterial or viral STD. Among the most serious of these complications are:

**Cancer** - Includes cervical cancer and its precursors which are due to human papilloma virus and liver cancer that can result after chronic infection with Hepatitis B virus.

**Infection of a fetus or newborn** - Includes conditions such as congenital syphilis, neonatal herpes, HIV infection, Hepatitis B infection, eye infections, and pneumonia.

**Pelvic Inflammatory Disease (PID)** - Can cause permanent damage to the female reproductive tract and lead to ectopic pregnancy, infertility, or chronic pelvic pain.

**Preterm birth** - Can result from maternal infection.

**Sexually transmitted HIV infection** - Can be facilitated by the presence of an inflammatory or ulcerative STD in one or both sex partners.

**Sudden Infant Death Syndrome (SIDS)** - Sudden unexplained death of an infant from an unknown cause. There is evidence that infants living with cigarette smokers suffer higher rates of SIDS.

**Suicide** - Intentional, self-inflicted fatal injury.

**Syphilis Elimination** - Refers to the elimination of sustained domestic transmission of syphilis. This means that there is no continuing transmission of the disease within a community or jurisdiction and absence of transmission within a jurisdiction except within 90 days of report of an imported case.

**Teen Pregnancy Rate** - Total live births to adolescents aged 18 and under per 1,000 women.

**Violence-Related School Suspension Rate** - The number of suspensions and expulsions resulting from verbal or physical attacks against teachers, staff or students per 1,000 students.

**Viral STDs** - Sexually transmitted viral infections, human immunodeficiency (HIV) infection, herpes simplex type 2, human papillomavirus (HPV infection), and Hepatitis B (HBV) infection.



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